

Mandatory Greenhouse Gas Reporting Rule: EPA's Response to Public Comments

Volume No.: 1

Selection of Source Categories to Report and Level of Reporting

Selection of Source Categories to Report and Level of Reporting

U. S. Environmental Protection Agency Office of Atmosphere Programs Climate Change Division Washington, D.C.

FOREWORD

This document provides EPA's responses to public comments on EPA's Proposed Mandatory Greenhouse Gas Reporting Rule. EPA published a Notice of Proposed Rulemaking in the Federal Register on April 10, 2009 (74 FR 16448). EPA received comments on this proposed rule via mail, e-mail, facsimile, and at two public hearings held in Washington, DC and Sacramento, California in April 2009. Copies of all comments submitted are available at the EPA Docket Center Public Reading Room. Comments letters and transcripts of the public hearings are also available electronically through http://www.regulations.gov by searching Docket ID EPA-HO-OAR-2008-0508.

Due to the size and scope of this rulemaking, EPA prepared this document in multiple volumes, with each volume focusing on a different broad subject area of the rule. This volume of the document provides EPA's responses to significant public comments regarding the selection of source categories to report and the level of reporting.

Each volume provides the verbatim text of comments extracted from the original letter or public hearing transcript. For each comment, the name and affiliation of the commenter, the document control number (DCN) assigned to the comment letter, and the number of the comment excerpt is provided. In some cases the same comment excerpt was submitted by two or more commenters either by submittal of a form letter prepared by an organization or by the commenter incorporating by reference the comments in another comment letter. Rather than repeat these comment excerpts for each commenter, EPA has listed the comment excerpt only once and provided a list of the commenters who submitted the same form letter or otherwise incorporated the comments by reference in table(s) at the end of each volume (as appropriate).

EPA's responses to comments are generally provided immediately following each comment excerpt. However, in instances where several commenters raised similar or related issues, EPA has grouped these comments together and provided a single response after the first comment excerpt in the group and referenced this response in the other comment excerpts. In some cases, EPA provided responses to specific comments or groups of similar comments in the preamble to the final rulemaking. Rather than repeating those responses in this document, EPA has referenced the preamble.

While every effort was made to include the significant comments related to the selection of source categories to report and the level of reporting in this volume, some comments inevitably overlap multiple subject areas. For comments that overlapped two or more subject areas, EPA assigned the comment to a single subject category based on an assessment of the principle subject of the comment. For this reason, EPA encourages the public to read the other volumes of this document with subject areas that may be relevant to the selection of source categories to report and the level of reporting.

The primary contact regarding questions or comments on this document is:

Carole Cook (202) 343-9263

U.S. Environmental Protection Agency Office of Atmospheric Programs Climate Change Division Mail Code 6207-J 1200 Pennsylvania Avenue, NW Washington, D.C. 20460

ghgreportingrule@epa.gov

TABLE OF CONTENTS

<u>Section</u>		<u>Page</u>	
1.	SELECTION OF SOURCE CATEGORIES TO REPORT	1	
2.	SELECTION OF LEVEL OF REPORTING	117	

1. SELECTION OF SOURCE CATEGORIES TO REPORT

Commenter Name: Colin High

Commenter Affiliation: Resource Systems Group, Inc.

Document Control Number: EPA-HQ-OAR-2008-0508-1644.1

Comment Excerpt Number: 2

Comment: EPA proposes "not to provide for adjustments to take into account the purchases of renewable energy credits or other mechanisms" in its calculation of indirect emissions. We believe that EPA's proposal in this area should be reconsidered. The total regulatory framework governing GHG emissions should recognize the important GHG reduction benefits associated with purchases of renewable energy credits (RECs). This recognition can be provided through a variety of mechanisms, including the structure of the GHG emissions inventory as well as the allowance allocation regulations. For example, regulations issued by many States under the Regional Greenhouse Gas Initiative have provided for a Voluntary Renewable Energy Set-Aside that retires allowances commensurate with CO₂ emissions reductions associated with voluntary purchases of renewable energy and renewable energy credits. The EPA-DOE Green Power Partnership as well as other EPA and DOE programs have played a leading role in encouraging the purchase of RECs because of their value in promoting clean energy development. We urge you to consult the leadership of these programs in crafting the final GHG reporting rule.

Response: Please see the Section III.B. of the preamble for our response to comments on reporting of electricity purchases and other indirect emissions.

Commenter Name: Kelly R. Carmichael

Commenter Affiliation: NiSource

Document Control Number: EPA-HQ-OAR-2008-0508-1080.2

Comment Excerpt Number: 18

Comment: The electric power sector does believe that management of indirect emissions will be an important component of a future GHG emissions reduction program. In fact, many electric utilities purchase large volumes of emissions-free generation from 3rd parties, and market this power either on a blended basis or in some cases as a separate category of "green power." In addition, many electric utilities offer programs to their customers to reduce peak demand or reduce consumption through the application of energy efficiency and energy management technologies and systems. These programs reduce the direct emissions of GHG by reducing the demand for electricity generated from fossil fuels. While these reductions would be reflected in the direct emissions reported by the electricity generators, the reductions of GHG due to less demand would be caused by actions taken by either the local electricity distributor, the customer or through combined action. In a future mandatory GHG reduction program, such as cap-and-trade, the distributor and the customers would want to be in a position to earn credits for these reductions. These credits would be based upon reductions in indirect emissions. Thus, there would need to be a methodology developed in the future to estimate indirect emissions and allow credits for reductions in GHG due to demand side management actions.

Response: See the response to comment EPA-HQ-OAR-2008-0508-1644.1, excerpt 2.

Commenter Name: Dr. James J. Pletl

Commenter Affiliation: Hampton Roads Sanitation District (HRSD) Technical Services

Division

Document Control Number: EPA-HQ-OAR-2008-0508-1743

Comment Excerpt Number: 2

Comment: HRSD agrees with the EPA's determination that "POTWs are not included in this proposal because ... emissions from POTWs do not exceed the thresholds considered under this rule." (FR Pg 16560). Relative to the current GHG US and global annual emissions, POTWs are an insignificant source of GHGs and should not be required to report.

Response: EPA thanks the commenter for their input.

Commenter Name: Laurence K. Lau

Commenter Affiliation: State of Hawaii Department of Health **Document Control Number:** EPA-HQ-OAR-2008-0508-0420

Comment Excerpt Number: 4

Comment: Collect other sector based information. It will greatly assist state analyses of emissions if other data may be collected, and segregated into more refined sectors, so trends can be analyzed. For example, Hawaii has a special interest in the travel industry.

Response: The objective of this rule is to collect data on facility-level direct emissions and supply of fuels and industrial GHGs that can inform future climate policy and program development. To this end, EPA has finalized this rule with 31 source categories and we are evaluating comments and other information for the remaining source categories included in the proposed rule. Note that although EPA is not finalizing all the source categories it proposed at this time, this final rule meets the instructions of the FY2008 Appropriations Act to develop a mandatory reporting rule that covers all sectors of the economy and to consider upstream and downstream sources, as appropriate.

Although EPA is not including the travel industry as a specific source category, the final rule covers many of the emissions associated with the industry through the reporting of emissions for stationary combustion units and the collection of data from mobile source engines. For further discussion of selection of source categories, see the preamble to section on selection of source categories to report. With respect to the types of data collected, see the comment response document on Subpart A, Content of Annual Report.

Commenter Name: Laurence K. Lau

Commenter Affiliation: Hawaii Department of Health

Document Control Number: EPA-HQ-OAR-2008-0508-0329.1

Comment Excerpt Number: 6

Comment: EPA should collect other sector based information. It will greatly assist state analyses of emissions if other data may be collected, and segregated into more refined sectors, so trends can be analyzed. For example, Hawaii has a special interest in the travel industry.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0420, excerpt 4.

Commenter Name: Pamela F. Faggert **Commenter Affiliation:** Dominion

Document Control Number: EPA-HQ-OAR-2008-0508-1741

Comment Excerpt Number: 11

Comment: We support EPA's proposal that biogenic emissions be not included in the aggregation of emissions to determine reporting applicability. However, since the proposed rule still requires facilities that exceed the 25,000 ton threshold (excluding biogenic emissions) to separately report biogenic emissions, we request that EPA provide clarification that facilities that exclusively burn biomass, and would not otherwise trigger the reporting threshold (from emissions from other onsite activities), are exempt from the rule.

Response: EPA confirms that a facility that burns exclusively biomass would not have to report under this rule if (1) the facility does not contain any of the source categories listed in 40 CFR 98.2(a)(1) (i.e., the "all-in" source categories) AND (2) combined emissions from the threshold source categories listed in 40 CFR 98.2(a)(2) are less than 25,000 metric tons CO₂e per yr. See the comment response document on subpart A, Applicability, for details on how applicability is determined and how emissions are calculated for applicability determination purposes.

Commenter Name: Robert E. Murray

Commenter Affiliation: Murray Energy Corporation

Document Control Number: EPA-HQ-OAR-2008-0508-1577

Comment Excerpt Number: 15

Comment: The Energy Information Administration ("EIA") already collects information on the BTU, sulfur and ash content of coal used in power generation systems. This information alone is able to aid in the calculation of total CO₂e emissions, yet EPA is forcing an additional burden upon additional sectors of the economy to calculate and report greenhouse gas emissions. Coal mining entities should be permitted to use the EIA information to calculate their carbon emissions and prevent unnecessary costs that will ultimately raise the price of electricity and damage the very foundation of what has made our economy thrive in the past: cheap energy. Because of the EIA's existing data collection, Murray Energy recommends that coal mining operations be exempted from this new duplicative, unnecessary, burdensome and extremely expensive proposal.

Response: Please see the discussion in the preamble on source categories to report. At this time, EPA is not going final with the suppliers of coal subpart. As we consider next steps, we will be reviewing the public comments and other relevant information. Thus, we are not responding to comments on this subpart at this time.

Commenter Name: George H. Berghorn

Commenter Affiliation: Michigan Forest Products Council (MFPC) **Document Control Number:** EPA-HQ-OAR-2008-0508-0721.1

Comment Excerpt Number: 4

Comment: The growing carbon credit trading market has been incrementally gaining traction through programs around the country. Several programs in Michigan involve the aggregation of carbon offsets through agricultural conservation practices and working forests. Ignoring this important economic and environmental tool by not considering sinks and offsets in the reporting rule fails to recognize the current state of the pulp and paper sector (among others), especially in states such as Michigan with a significant managed forest base (6.7 million acres of public forestland, 2.2 million acres of corporate forestland, and 10.4 million acres of non-industrial private forestland) and a need to diversify traditional industrial economies. We recommend that the EPA develop mechanisms by which reporters can include sinks and offset projects as an important part of their total emission picture.

Response: See the preamble section containing responses on source categories to report for our response to the inclusion of sinks and offset projects.

Commenter Name: Shawne C. McGibbon

Commenter Affiliation: Small Business Administration (SBA) **Document Control Number:** EPA-HQ-OAR-2008-0508-0979.1

Comment Excerpt Number: 3

Comment: While most small entities will not be subject to the GHG reporting rule on the basis of the reporting threshold, thousands of small entities will still be covered. These entities include small businesses (e.g., small pulp and paper facilities, small coal mining operations). [footnote: The great majority of the coal mines in the United States are operated by small businesses; 48% of U.S. mines produce 100,000 tons of coal or less per year. The National Mining Association has informed Advocacy that it expects GHG reporting requirements to add \$7.00 per ton to the cost of small mining operations (or as much as \$700,000 per year).] and small communities (e.g., municipal utilities). Both "upstream" GHG sources such as small coal mining operations and "downstream" GHG sources such as small paper mills would have to measure and report their emissions. Because the small coal operation has to report on estimated emissions from the coal it produces while the paper mill would report on emissions from boilers actually burning the coal, there will be double counting of the GHG emissions. Virtually all of the GHG emissions from coal should be accurately captured by downstream facilities when the coal is combusted. Therefore, EPA should clarify that coal mining operations, and possibly other small upstream GHG sources, should not have to report GHG emissions estimates because it is overwhelmingly likely to lead to double-counting. EPA should also exclude the smallest coal mines and other upstream sources that contribute insignificantly to coal, petroleum, natural gas, and other energy source production in the U.S. Alternatively, EPA should allow such upstream sources to use simplified reporting methods designed to exclude GHG emissions that are counted by downstream sources during combustion.

Response: For the response reporting of upstream and downstream emissions, see the preamble (section II.D), as well as the response to comments on legal issues (volume 9). With respect to suppliers of coal, at this time EPA is not going final with the coal suppliers' subpart. As we consider next steps, we will be reviewing the public comments and other relevant information. Thus, we are not responding to comments on this subpart at this time. As discussed in Section VII.D of the preamble, EPA's analysis of the economic impact on small businesses indicates that

this rule does not have a significant economic impact on small entities.

Commenter Name: Bob Dinneen

Commenter Affiliation: Renewable Fuels Association (RFA) **Document Control Number:** EPA-HQ-OAR-2008-0508-0494.1

Comment Excerpt Number: 19

Comment: As EPA recognized, the Proposed Rule would have double reporting of GHG emissions. 74 Fed. Reg. at 16,466. Although the FY2008 Consolidated Appropriations Act refers to both upstream and downstream users, EPA's stated goal is to focus on significant sources of emissions. As EPA recognized with respect to the Toxic Release Inventory reporting program, "the first few years' data should be evaluated to determine whether modifications of the threshold would meet the statutory test of obtaining reporting on a substantial majority of the releases (i.e., pounds released per year) of each chemical from subject facilities." 53 Fed. Reg. at 4508. In this way, EPA can focus its efforts on the most significant sources -- the asserted goal of the proposed rule -- and allow smaller facilities with less resources time to prepare for the rule.

Response: For the response reporting of upstream and downstream emissions, see the response to EPA-HQ-OAR-2008-0508-0979.1, excerpt 3. Also note that smaller facilities are excluded from reporting by the threshold, as discussed in the preamble response on thresholds. For response to comments on the TRI approach to thresholds, please see Volume 2: Selection of Reporting Thresholds, Greenhouse Gases, and De Minimis Provisions.

Commenter Name: Sarah E. Amick

Commenter Affiliation: The Rubber Manufacturers Association (RMA)

Document Control Number: EPA-HQ-OAR-2008-0508-0647.1

Comment Excerpt Number: 2

Comment: RMA opposes provisions in the proposed rule that would cause double reporting of greenhouse gas emissions. Reporting emissions related to either upstream or downstream facilities would not enable a facility to report accurate emission of greenhouse gases and will likely inflate emission numbers for facilities. These provisions also raise questions and confusion as to who reports, direct emitters or downstream sources. We recommend that the EPA eliminate all double reporting requirements in order to provide clarity and to ensure the accurate reporting of greenhouse gas emissions for facilities.

Response: For the response reporting of upstream and downstream emissions, see the response to EPA-HQ-OAR-2008-0508-0979.1, excerpt 3.

Commenter Name: See Table 5

Commenter Affiliation:

Document Control Number: EPA-HQ-OAR-2008-0508-0455.1

Comment Excerpt Number: 1

Comment: Section IV.B of the Proposal's preamble states that it is possible to construct a reporting system with no double-reporting, where emissions coverage would remain largely the

same as the Proposal. Under such a system, the Agency estimates that the total number of facilities affected would be approximately 32% lower than the Proposal, and the private sector costs would be approximately 26% lower than the Proposal. 74 Fed. Reg. at 16466. The Class of '85 encourages EPA to eliminate the double reporting inherent in the Proposal by requiring as much upstream reporting as possible. Double reporting will do nothing more than increase the regulatory burden on affected facilities without achieving any environmental benefits. EPA should strive for as much accuracy as possible in the annual GHG database by eliminating double reporting.

Response: For the response reporting of upstream and downstream emissions, see the response to EPA-HQ-OAR-2008-0508-0979.1, excerpt 3.

Commenter Name: Bryan L. Brendle

Commenter Affiliation: National Association of Manufacturers **Document Control Number:** EPA-HQ-OAR-2008-0508-0572.1

Comment Excerpt Number: 1

Comment: The NAM believes that an effective, comprehensive federal climate policy must account for all sectors of the economy in order to disperse regulatory requirements in a manner that will avoid adverse economic impacts. Federal policy makers cannot implement such a policy without first having a registry that accounts for emissions from those sectors. EPA must take steps to structure its reporting requirements in an equitable manner that accurately reflects each sector's share of GHG emissions so as to avoid double-counting and possible disproportionate regulation of one particular sector under a future comprehensive federal climate policy. The NAM believes that EPA should drop provisions in its proposed rule that trigger duplicative reporting. As EPA states in the proposed rule, "there is inherent double reporting of emissions in a program that includes both upstream and downstream sources." EPA even concedes that it is possible to frame an effective and less costly inventory without double reporting and should therefore take affirmative steps to avoid wasteful processes that will impose cost burdens on industry and distort data gathered by regulators. Furthermore, focusing reporting requirements on one, or a handful of economic sectors will not only distort the true picture of domestic GHG emissions, but may also increase cost burdens on a particular sector by adding red-tape to operations. This will undermine a disproportionately burdened sector's ability to compete internationally and provide jobs to an economy attempting to recover from the deepest recession the U.S. has witnessed since the 1930s.

Response: For the response reporting of upstream and downstream emissions, see the response to EPA-HQ-OAR-2008-0508-0979.1, excerpt 3.

Commenter Name: Bryan Brendle

Commenter Affiliation: National Association of Manufacturers (NAM)

Document Control Number: EPA-HQ-OAR-2008-0508-1527

Comment Excerpt Number: 1

Comment: The NAM believes that an effective, comprehensive federal climate policy must account for all sectors of the economy in order to disperse regulatory requirements in a manner that will avoid adverse economic impacts. Federal policy makers cannot implement such a policy

without first having a registry that accounts for emissions from those sectors. EPA must take steps to structure its reporting requirements in an equitable manner that accurately reflects each sector's share of GHG emissions so as to avoid double-counting and possible disproportionate regulation of one particular sector under a future comprehensive federal climate policy. The NAM believes that EPA should drop provisions in its proposed rule that trigger duplicative reporting. As EPA states in the proposed rule, "there is inherent double reporting of emissions in a program that includes both upstream and downstream sources." EPA even concedes that it is possible to frame an effective and less costly inventory without double reporting and should therefore take affirmative steps to avoid wasteful processes that will impose cost burdens on industry and distort data gathered by regulators. Furthermore, focusing reporting requirements on one, or a handful of economic sectors will not only distort the true picture of domestic GHG emissions, but may also increase cost burdens on a particular sector by adding red-tape to operations. This will undermine a disproportionately burdened sector's ability to compete internationally and provide jobs to an economy attempting to recover from the deepest recession the U.S. has witnessed since the 1930s.

Response: For the response reporting of upstream and downstream emissions, see the response to EPA-HQ-OAR-2008-0508-0979.1, excerpt 3.

Commenter Name: John W. Dwyer

Commenter Affiliation: Lignite Energy Council (LEC)

Document Control Number: EPA-HQ-OAR-2008-0508-0422.1

Comment Excerpt Number: 1

Comment: LEC is commenting specifically on a fundamental flaw in the proposed rule ... the requirement that coal mines and coal combustion facilities will be required to report greenhouse gas (GHG) emissions for the same coal product. This "double reporting" from upstream and downstream sources will add unnecessary operation costs to the price of lignite coal sold to our customers. In turn, these increased costs will ultimately be paid by consumers of electricity and the various products produced by the coal gasification facility. The concept of upstream reporting from suppliers originated in FY 2008 Appropriations Act where Congress directed EPA to: "...publish a ... final rule ... to require mandatory reporting of greenhouse gas emissions above appropriate thresholds in all sectors of the economy of the United States." Congress, however, did not mandate double reporting, but rather left it to the EPA Administrator's discretion. The EPA states in the preamble that it is requiring upstream reporting from suppliers of industrial gases and fossil fuels to avoid requiring reporting from "hundreds of thousands" of emission sources. EPA, however, does not distinguish transportation fuel from mines that supply lignite for electricity generation or coal gasification activities. Lignite coal is distinguishable from other fossil fuels because nearly all of the lignite produced in North Dakota is combusted by large facilities generating electricity or in the coal gasification process. More specifically, approximately 79 percent of North Dakota lignite coal is used to generate electricity, 13.5 percent is used to generate synthetic natural gas, and 7.5 percent is used to produce fertilizer products (anhydrous ammonia & ammonium sulfate). Less than 1% is used as a home heating fuel, as fertilizer and for oil well drilling mud. With over 99 percent of lignite being used by regulated combustion facilities, virtually all emissions created by the combustion of lignite will be accurately monitored and reported downstream at the point of combustion. The LEC does not believe that EPA's justification for requiring upstream reporting from transportation fuel suppliers adequately applies to suppliers of coal. In order to comply with the Congressional

intent of the explanatory statement accompanying the appropriations act referenced above, EPA should provide source specific justification for requiring upstream reporting, and eliminate such requirements where no justification can be reasonably made. In the case of lignite coal, the proposed rule's upstream and downstream reporting requirements will result in unnecessary double counting of the same CO₂ emissions reported by two separate sources, and unnecessary monitoring costs to collect data covering minuscule secondary uses of the product. Double reporting is inherently flawed for another reason. The proposed rule requires suppliers of lignite to report the amount of CO₂ the lignite would emit, assuming 100 percent combustion. No power plant or other lignite user is perfectly efficient. As such, North Dakota lignite mining companies will be reporting more GHG emissions than can actually be emitted, creating an inherent inaccuracy in the data. For these reasons, the LEC urges the EPA to eliminate Subpart KK from the rule. If the potential emissions from lignite are not reported, the EPA will not lose any GHG inventory since lignite combustion facilities will report actual CO₂ emissions. Furthermore, removal of the source category will simplify EPA's data handling burdens and will improve accuracy and public confidence in the data.

Response: For the response reporting of upstream and downstream emissions, See the response to EPA-HQ-OAR-2008-0508-0979.1, excerpt 3. With respect to coal suppliers, at this time EPA is not going final with the coal suppliers subpart. As we consider next steps, we will be reviewing the public comments and other relevant information. Thus, we are not responding to comments on this subpart at this time

Commenter Name: Robert J. Martineau, Jr

Commenter Affiliation: Counsel, Waller Lansden Dortch & Davis, LLP

Document Control Number: EPA-HQ-OAR-2008-0508-0414.1

Comment Excerpt Number: 1

Comment: Nissan believes that to minimize the burden on industry the GHG Reporting Rule should be designed to minimize the double counting in the proposed rule. The rule imposes substantial and detailed monitoring, recordkeeping, and reporting requirements on industrial establishments and others. EPA justifies these requirements on the need to collect relevant information and a complete and accurate picture of GHG emissions. Nissan agrees that obtaining a good inventory of U.S. GHG emissions is appropriate. However, EPA should make every effort to minimize or eliminate double counting of emissions to reduce the overall cost of the program. Every GHG emission that is double-counted increases the cost of the program at a time when U.S. industry is facing unprecedented economic strain in light of the current economy. EPA acknowledges in the Preamble that its proposed option is 26% more costly than a system that would limit double-counting. In these difficult economic times, EPA needs to consider whether imposing 26% more costs on industry because of the double-counting inherent in the proposal is justified. Moreover, double-counting will lead to an over-inflated perception of U.S. GHG emissions. As with other reports, such as TRI reports, press coverage will surround annual releases of data reported under this GHG rule. Stories will abound about how U.S. GHG emissions are compared to other countries, or how one state compares to others. Lost in discussion and public understanding of the data will be recognition that the GHG totals for the U.S. (or a particular state) contain some double-counted emissions.

Response: For the response reporting of upstream and downstream emissions, See the response to EPA-HQ-OAR-2008-0508-0979.1, excerpt 3.

Commenter Name: Fredrick Palmer and Dianna Tickner

Commenter Affiliation: Peabody Energy

Document Control Number: EPA-HQ-OAR-2008-0508-0552.1

Comment Excerpt Number: 2

Comment: EPA's generic rationale for upstream reporting is that "[i]n many cases, the fossil fuels and industrial GHGs supplied by producers and importers are used and ultimately emitted by a large number of small sources, particularly in the commercial and residential sectors (e.g., HFCs emitted from home AC units or GHG emissions from individual motor vehicles). To cover these direct emissions would require reporting by hundreds or thousands of small facilities." The Agency says that to avoid this onerous impact, the rule requires reporting by the far more limited number of "the suppliers of industrial gases and the suppliers of fossil fuels." Id. at 16466/1. Although this generic rationale for upstream reporting makes sense in the context of transportation fuel suppliers and chemical suppliers, it does not logically apply to coal suppliers. As EPA recognizes, there are more than 1300 coal suppliers who will be required to report under the rule, and many of these are small businesses, and some are very small indeed. See TSD, Appendix 1. Moreover, unlike the case in the transportation industry, there is obviously nothing impracticable about requiring those who actually combust the coal to report their CO₂ emissions. Ninety-three percent of the coal produced in this country is combusted by electric utilities, TSD at 6, Ex. 2, who already report their CO₂ emissions to EPA and who will continue to be required to do so under the proposed rule. Almost all of the balance of coal production is sold to industrial and manufacturing companies, id., which will also be required to report their CO₂ emissions under the proposed rule. Additionally, utilities report their coal purchases to the Energy Information Administration, including information on the origin mine, the tonnages purchased and the heat content. Id. at 29-36. Similarly, although EPA recognizes the obvious and almost complete double-counting of CO₂ emissions that the rule would produce when applied to coal suppliers, its justification for this double-counting applies to transportation fuel suppliers and not to coal suppliers. EPA states that "[p]olicies such as low-carbon fuel standards can only be applied upstream." Id. at 16466/2. Low-carbon fuel standards, however, apply to transportation fuel, not coal. The only other rationale that EPA supplies for upstream reporting of imputed emissions – in a half paragraph discussing EPA's legal authority –leaves coal suppliers to guess why and how such reporting is justified, why the availability of data from existing sources is not sufficient, and even whether EPA is referring to coal suppliers. EPA refers to the possible usefulness of imputed emissions data in establishing New Source Review Standards or Best Available Control Technology standards "for some combustion sources," but doesn't say whether this includes coal combustion sources and, if so, how and why the data would be useful and not duplicative of existing data. Similarly, EPA states that reporting of imputed emissions would be useful in developing non-regulatory approaches to controlling CO₂ emissions, but again the Agency does not say whether it is referring here to controlling CO₂ emissions from burning coal and, if so, how and why the data would be useful. Id. at 16455. In sum, EPA's failure to define the factors it relies on to apply its discretion to determine whether upstream coal supplier reporting is "appropriate" and reasonable, and its failure to provide a rationale for requiring such reporting specifically by coal suppliers, renders the proposal legally defective. Peabody urges EPA to further consider whether it truly needs the data it seeks to mandate from coal suppliers and, if so, to explain its reasoning. The term "appropriate" as used in the joint accompanying statement should be interpreted to require a balancing of benefits and costs. In the context here, EPA must balance the need by the Agency for the data required to be reported in the proposed rule with the costs to coal suppliers of acquiring the data, reporting it, and

otherwise complying with the rule. Determining whether it is reasonable to apply Section 114(a) to require upstream coal supplier reporting should similarly turn on a balancing of these benefit and cost factors. Peabody believes that the balance of these factors tips strongly against requiring coal supplier reporting.

Response: For the response reporting of upstream and downstream emissions, See the response to EPA-HQ-OAR-2008-0508-0979.1, excerpt 3. With respect to coal suppliers, at this time EPA is not going final with the coal suppliers subpart. As we consider next steps, we will be reviewing the public comments and other relevant information. Thus, we are not responding to comments on this subpart at this time

Commenter Name: See Table 7

Commenter Affiliation:

Document Control Number: EPA-HQ-OAR-2008-0508-0530.1

Comment Excerpt Number: 3

Comment: In addition, NGC believes EPA crafted the Proposed Rule in a broad manner that was not contemplated or required by the FY2008 Consolidated Appropriations Act. In particular, EPA interpreted the Act incorrectly, calling for both upstream and downstream reporting of GHG emission sources. NGC believes that the explanatory statement to the Act is most reasonably interpreted as an instruction to EPA to consider upstream and downstream reporting and to choose the approach that is appropriate for any given sector. In many cases, it is needlessly costly and burdensome for EPA to count the same unit of GHG both at the point of emission and further upstream. If there are compelling policy reasons in specific situations that would justify the collection of both upstream production and downstream sources, those situations and policies need to be identified clearly.

Response: For the response reporting of upstream and downstream emissions, See the response to EPA-HQ-OAR-2008-0508-0979.1, excerpt 3. See also response to comments for individual source categories included in the final rule for response to specific comments.

Commenter Name: Angela Burckhalter

Commenter Affiliation: Oklahoma Independent Petroleum Association (OIPA)

Document Control Number: EPA-HQ-OAR-2008-0508-0386.1

Comment Excerpt Number: 19

Comment: EPA is proposing to have upstream and downstream industries report GHG emissions. This will result in an overwhelming amount of information to review, verify, summarize, and determine what would ultimately be reported in a final GHG emission report. It is not clear in its proposal how EPA intends to address this issue to ensure that double reporting will not occur. We request EPA explain how this issue will be addressed to avoid inaccurate information being included in a final report that will be presented to policymakers and other public entities. In addition, EPA states that the FY2008 Consolidated Appropriations Act requires them to collect information from upstream and downstream sources; however, the language clearly allows EPA to use reasonable judgment. We request EPA focus its efforts on only the data that it truly needs.

Response: For the response reporting of upstream and downstream emissions, See the response to EPA-HQ-OAR-2008-0508-0979.1, excerpt 3. See also response to comments for individual source categories included in the final rule for response to comments on specific data elements to be reported.

Commenter Name: Thomas W. Easterly

Commenter Affiliation: Indiana Department of Environmental Management (IDEM)

Document Control Number: EPA-HQ-OAR-2008-0508-0525.1

Comment Excerpt Number: 26

Comment: The proposed rule should also only apply to downstream (or direct) emitters, and not upstream sources such as fuel suppliers. The combination of requiring reporting by both upstream and downstream sources would most likely result in duplicative reporting of GHG emissions data and is unnecessary. U.S. EPA should clearly define that the applicability is based on actual emissions, and not permitted emission levels, for facilities above the defined emissions threshold.

Response: For the response reporting of upstream and downstream emissions, See the response to EPA-HQ-OAR-2008-0508-0979.1, excerpt 3. . See the response on actual versus potential emissions in Volume 2: Selection of Reporting Thresholds, Greenhouses Gases, and De Minimis Provisions. For a response to general comments on how to determine applicability with the rule, please see the preamble discussion on determining applicability.

Commenter Name: Jeffrey L. Clark

Commenter Affiliation: Environmental Coordinator, Teck Alaska Incorporated

Document Control Number: EPA-HQ-OAR-2008-0508-0142

Comment Excerpt Number: 2

Comment: The proposed rule adds burden and cost by requiring both upstream and downstream sources of GHG to report. The EPA states on page 94 of the Preamble that by only reporting upstream calculated emissions the number of affected facilities would be cut by 32% and the cost of reporting cut 26%. Reporting both upstream and downstream emissions will result in double counting emissions. I recommend that the EPA only require upstream reporting. If the government's true intent to ultimately tax GHG emissions, then the EPA should eliminate the upstream reporting and only require downstream reporting. If the later occurs please simplify the reporting to ensure full compliance and to reduce costs.

Response: For the response reporting of upstream and downstream emissions, See the response to EPA-HQ-OAR-2008-0508-0979.1, excerpt 3.

Commenter Name: See Table 2

Commenter Affiliation:

Document Control Number: EPA-HQ-OAR-2008-0508-0477.1

Comment Excerpt Number: 7

Comment: EPA acknowledges the double-reporting of emissions that would result from the proposed rule – "There is inherent double-reporting of emissions in a program that includes both upstream and downstream sources." 74 Fed. Reg. at 16466. EPA also admits that "it is possible to construct a reporting system with no double-reporting" and that the costs of such a system would be "approximately 32% lower than the proposed option." Id. EPA contends that it pursued a rule that includes double-reporting due to 1) the language in the FY2008 Consolidated Appropriations Act and 2) assistance in the formulation of policies. EPA's reasoning is flawed, and the rule should be modified to eliminate double-reporting. First, as stated in the Joint Explanatory Statement accompanying the FY2008 Consolidated Appropriations Act, EPA has the discretion to "include in its rule reporting of emissions resulting from upstream production and downstream sources, to the extent that the Administrator deems it appropriate." [Footnote: Page 33 of the Joint Explanatory Statement to Accompany Consolidated Appropriations Amendment for Division F-Interior.]. Thus, EPA is not under any obligation to require double reporting, and has not articulated an appropriate rationale for doing so. Second, there are sufficient GHG inventories and fuel consumption data available to evaluate the impacts of policies without subjecting entities to additional burdensome reporting lacking a specific rationale. For any data that might be unavailable through the EIA or other public record, EPA can apply engineering best estimates to discern, with a high degree of confidence, the emissions resulting from upstream sources.

Response: For the response reporting of upstream and downstream emissions, See the response to EPA-HQ-OAR-2008-0508-0979.1, excerpt 3. For the response to the comment regarding use of EIA data, see Section III.MM of the preamble.

Commenter Name: Joseph J. Croce

Commenter Affiliation: Virginia Manufacturers Association (VMA) **Document Control Number:** EPA-HQ-OAR-2008-0508-0526.1

Comment Excerpt Number: 10

Comment: By the EPA's own admission, counting upstream and downstream emissions inevitably leads to "double-counting" of emissions. The problem is that the amount of overlap is not known with certainty. Therefore, the climate policies that arise from the information in the registry will be based on inaccurate information. On this issue, the EPA should conduct extensive research to ascertain the overlap in emissions inventory figures and devise a way to correct inventory information accordingly.

Response: For the response reporting of upstream and downstream emissions, See the response to EPA-HQ-OAR-2008-0508-0979.1, excerpt 3.

Commenter Name: [name not given]

Commenter Affiliation: Graphic Arts Coalition (GAC)

Document Control Number: EPA-HQ-OAR-2008-0508-0701.1

Comment Excerpt Number: 14

Comment: The Agency's system requires upstream suppliers of fossil fuels and GHG products to report the potential GHG emissions associated with the use of the products they supply to downstream consumers. For example, a heating oil supplier would be required to report the GHG

emissions associated with the combustion of the heating oil they supply to their customers. At the same time, the Agency's proposed system also requires downstream consumers to report the GHG emissions they produce from the combustion of fossil fuels or use of greenhouse gases. Thus, the Agency's proposed system will result in significant double counting of GHG emissions – first by the material supplier and then again by the material end users. The Agency needs to explain how it will address this significant data quality issue and why it is necessary to require both upstream and downstream users to report their GHG emissions, especially since downstream fossil fuel combustion and other GHG usage is ultimately constrained by the amount of material available from upstream suppliers.

Response: For the response reporting of upstream and downstream emissions, See the response to EPA-HQ-OAR-2008-0508-0979.1, excerpt 3.

Commenter Name: William C. Herz

Commenter Affiliation: The Fertilizer Institute (TFI)

Document Control Number: EPA-HQ-OAR-2008-0508-0952.1

Comment Excerpt Number: 47

Comment: The NPRM unnecessarily burdens the regulated community by requiring both upstream and downstream sources to report GHG emissions. EPA states in the Preamble to the NPRM that by only reporting upstream calculated emissions the number of affected facilities would be cut by 32 percent and the cost of reporting cut by 26 percent. 74 Fed. Reg. at 16,466. The benefits of lowering costs to facilities by requiring only upstream source reporting greatly outweigh any benefits derived from the NPRM's proposed broad reporting requirements, because reporting from both upstream and downstream sources will not improve understanding of GHG emissions, but will skew the data by duplicative emissions reporting. For example, the NPRM's proposed requirements for monthly analyses of natural gas carbon content, molecular weight and HHV from downstream users when data may already be provided by natural suppliers is both redundant and unnecessary for purposes of reviewing future policy options by EPA. Upstream data are more reliable and less costly to obtain than downstream monitoring. For example, there are fewer points of natural gas extraction than there are points of natural gas combustion. As such, reporting "upstream" means fewer entities need to calculate their GHG emissions, but the reporting received from upstream emitters still accurately reflects actual emissions, thus achieving the desired goal of the NPRM, while lowering the cost on the private sector.

Response: For the response reporting of upstream and downstream emissions, See the response to EPA-HQ-OAR-2008-0508-0979.1, excerpt 3.

Commenter Name: Steven M. Pirner

Commenter Affiliation: South Dakota Department of Environment and Natural Resources (SD

DENR)

Document Control Number: EPA-HQ-OAR-2008-0508-0576

Comment Excerpt Number: 2

Comment: Subparts KK through NN of the Proposed Rule require suppliers of coal, coal-based liquid fuels, petroleum products, and natural gas and natural gas liquids to report CO₂ emissions

from combustion of the product they transport. Subparts C and D of the Proposed Rule require facilities with stationary combustion sources and electric plants to also report CO_2 emissions from the combustion of these same products. This results in the Proposed Rule double-counting carbon emissions. Subparts C and D are just examples where the Proposed Rule double-counts carbon emissions. There are other Subparts in the Proposed Rule that require consumers of these products to report CO_2 emission. EPA needs to clarify the purpose of having both the supplier and the consumer reporting CO_2 emissions and how EPA will prevent double-counting of carbon emissions.

Response: For the response reporting of upstream and downstream emissions, See the response to EPA-HQ-OAR-2008-0508-0979.1, excerpt 3. With respect to suppliers of coal, at this time EPA is not going final with the coal suppliers' subpart. As we consider next steps, we will be reviewing the public comments and other relevant information. Thus, we are not responding to comments on this subpart at this time.

Commenter Name: Lawrence W. Kavanagh

Commenter Affiliation: American Iron and Steel Institute (AISI) **Document Control Number:** EPA-HQ-OAR-2008-0508-0695.1

Comment Excerpt Number: 26

Comment: The legislation driving the establishment of the GHG reporting rule directs EPA to include reporting of both upstream (energy producers and suppliers) and downstream (energy users) sources, "to the extent the Administrator deems it appropriate." The preamble to the rule states that maximizing upstream reporting is an EPA objective. However, the proposed rule mandates reporting by both upstream and downstream sources in the extreme, and AISI and ACCCI question the extent of this overlap. We strongly support the concept of reporting emissions upstream to the maximum extent possible and believe this methodology to be wholly appropriate to accomplish many of the objectives of the program. This will minimize the administrative burden of both EPA and energy consumers and reduce the potential for doublecounting. EPA proposes to require fuel suppliers to report the potential CO₂ emissions associated with all fuels (e.g., coal, natural gas, petroleum products). However, the additional CO₂ emissions reporting required of all combustion sources or processes utilizing those fuels is at best unduly excessive and burdensome and at worst leads to double-counting. Whereas EPA may in some special cases deem it appropriate to require some downstream reporting of emissions already accounted for by fuel supplier reports, the extent of downstream reporting in EPA's proposal is excessive. Our comments on the methodologies applicable to the iron and steel and cokemaking industries elsewhere in these comments provide numerous examples where this can lead to not only double-counting but also triple- and quadruple-counting because of the distribution of carbon-bearing waste gas fuels within the industry. We acknowledge EPA's intent to distinguish between double-reporting and double-counting. In fact, the facility-wide carbon balance approach we recommend in our general comments on the proposed iron and steel source category's reporting requirements embodies reporting of fuel-based emissions at iron and steel facilities that are also reported by fuel suppliers, and we believe that simplified and more straightforward approach will alleviate the difficulty of distinguishing between double-reporting and double-counting.

Response: For the response reporting of upstream and downstream emissions, See the response to EPA-HQ-OAR-2008-0508-0979.1, excerpt 3. Also see the response to comments for the Iron and Steel subpart.

Commenter Name: See Table 4

Commenter Affiliation:

Document Control Number: EPA-HQ-OAR-2008-0508-0433.2

Comment Excerpt Number: 47

Comment: NPRA acknowledges the explanatory statement to the Appropriations Act directing EPA to consider "upstream production and downstream sources" to the extent EPA "deems it appropriate." 74 Fed. Reg. 16454. However, there are significant and realistic concerns that the Agency is requesting data beyond what is necessary to gather adequate and useful data to establish a nationwide GHG inventory. The inherent assumption that all refinery products and NGLs are combusted for fuel, coupled with the degree of double counting the proposed approach engenders, will only result in an unreliable assessment. Despite the latitude to consider "upstream production and downstream sources", the proposed approach implies EPA interprets Congress as having directed EPA to count the same unit of GHG at the point of emission and further upstream. This interpretation is clearly illogical. Consequently, the explanatory statement in the Appropriations Act is most reasonably interpreted as an instruction to EPA to only consider upstream and downstream reporting, and choose between these approaches as appropriate in any given sector. If there are compelling policy reasons in specific situations that would justify the collection of both upstream production and downstream sources, those situations and policies should be clearly identified and validated.

Response: For the response reporting of upstream and downstream emissions, See the response to EPA-HQ-OAR-2008-0508-0979.1, excerpt 3.

Commenter Name: James Greenwood

Commenter Affiliation: Valero Energy Corporation

Document Control Number: EPA-HQ-OAR-2008-0508-0571.1

Comment Excerpt Number: 5

Comment: Despite comments throughout the Preamble and Proposed Rule regarding EPA's attempt to minimize the double counting of emissions, the Rule as currently proposed will create significant double counting of fuels or feedstocks used at other industrial facilities. For instance, under the proposal potential emissions from petroleum coke will be estimated in the inventory because it is a petroleum product. However, petroleum coke may be sold to a power plant where it will be used as fuel and its carbon will again be counted as emitted from another stationary source in its emission inventory. Also it is commonplace for petroleum refineries to exchange intermediate products for further processing into finished fuels. Counting of the potential emissions from intermediate products will result in significant double counting and likely overestimation of total emissions. We believe that this double counting could be avoided by not requiring refineries to report potential emissions from finished products, but instead using production information that is already provided to EIA and is readily available to EPA.

Response: For the response reporting of upstream and downstream emissions, See the response to EPA-HQ-OAR-2008-0508-0979.1, excerpt 3. For the response to the comment on using EIA data, see Section III.MM of the preamble.

Commenter Name: Claire Olson

Commenter Affiliation: Basin Electric Power Cooperative **Document Control Number:** EPA-HQ-OAR-2008-0508-0637.1

Comment Excerpt Number: 3

Comment: Basin Electric urges EPA to make every effort to minimize or eliminate double counting, and double reporting, of GHG emissions. An inaccurate representation of GHG emissions likely will result in policy development that is overly costly, burdensome, unfair, and not representative of actual emissions and impacts. Data used in policy development must support the policy, and therefore must be accurate and not duplicated.

Response: For the response reporting of upstream and downstream emissions, See the response to EPA-HQ-OAR-2008-0508-0979.1, excerpt 3.

Commenter Name: George Woods

Commenter Affiliation: E. Roberts Alley & Associates, Inc. **Document Control Number:** EPA-HQ-OAR-2008-0508-0269.1

Comment Excerpt Number: 1

Comment: In regard to double counting, why is EPA going to proceed with this thought process, won't this produce emission numbers that are greatly inflated much like SARA 313 releases? Why is double counting, and in some cases triple counting going to be allowed? There appears to be more than double counting occurring where Coal Mining, Coal Importing and Exporting, Waste Coal Reclaimers, Coal-Based Liquid Fuels and the end users of Coal are concerned.

Response: For the response reporting of upstream and downstream emissions, See the response to EPA-HQ-OAR-2008-0508-0979.1, excerpt 3. With respect to suppliers of coal, at this time EPA is not going final with the coal suppliers' subpart. As we consider next steps, we will be reviewing the public comments and other relevant information. Thus, we are not responding to comments on this subpart at this time.

Commenter Name: See Table 8

Commenter Affiliation:

Document Control Number: EPA-HQ-OAR-2008-0508-0679.1

Comment Excerpt Number: 40

Comment: API recognizes that the non-binding, explanatory statement to the Appropriations Act directed EPA to consider "upstream production and downstream sources" to the extent EPA "deems it appropriate." 74 Fed. Reg. 16454. API is concerned, however, that in many provisions EPA has cast its net beyond what is necessary to gather adequate and useful data and in many places requests information that results in unnecessary double counting or inaccurate counting (e.g., assuming that all NGLs are burned). API believes that it would be illogical for Congress to

direct EPA to count the same unit of GHG at the point of emission and further upstream. As such, the explanatory statement is most reasonably interpreted as an instruction to EPA to consider upstream and downstream reporting, but choose between these approaches as appropriate in any given sector. If there are compelling policy reasons in specific situations that would justify the collection of both upstream production and downstream sources, those situations and policies need to be clearly identified. The overriding principle, however, should be to minimize double counting in order to avoid inaccurate assessments, unjustified complications and increased costs. The rule should be directed solely at reporting actual "greenhouse gas emissions" and avoid double counting.

Response: For the response reporting of upstream and downstream emissions, see the response to EPA-HQ-OAR-2008-0508-0979.1, excerpt 3.

Commenter Name: Carl H. Batliner

Commenter Affiliation: AK Steel Corporation

Document Control Number: EPA-HQ-OAR-2008-0508-0337.1

Comment Excerpt Number: 6

Comment: Under the proposed rule, coke plants are required to report emissions from combustion stacks under the provisions of Subpart C and from pushing operations using an emission factor stipulated in Subpart Q. In addition, many coke plants have boilers or other combustion sources that would be subject to the proposed reporting requirements under Subpart C. However, any carbon (and therefore CO₂) emitted from coke oven combustion stacks would have been previously reported by the coal suppliers under Subpart KK. Accordingly, the reporting of CO₂ emissions from the coke pushed as well as the combustion of coke oven gas for underfiring ovens or in other combustion sources is duplicative. Similar to coke plants, the source of carbon in a blast furnace and the blast furnace gas is coke or other carbon-bearing fuels (natural gas, oil, pulverized coal) and raw materials (limestone, dolomite) that combine with the oxides in the iron ore or pellets. Any CO₂ emissions from the combustion sources that combust the blast furnace gas will have been previously reported by the carbon-bearing fuel suppliers under Subpart KK, less the small contribution from the raw materials, which would make reporting these emissions duplicative. The coke will be reported three times. Furthermore, the requirements for reporting GHG emissions from these combustion sources are inconsistent with the stipulated objective of the rule -as well as the primary intent of the Congressional mandate to maximize reporting of upstream sources to the maximum extent possible. As a result, AK Steel respectfully requests that EPA delete the GHG reporting requirement for coke oven gasfired and blast furnace gas-fired combustion sources from the rule in order to eliminate duplicate reporting.

Response: For the response reporting of upstream and downstream emissions, See the response to EPA-HQ-OAR-2008-0508-0979.1, excerpt 3. At this time we are not going final with subpart KK (Suppliers of Coal). As we consider next steps, we will be reviewing the public comments and other relevant information. Therefore, we are not responding to comments on subpart M at this time. For the specific request to exempt coke oven gas-fired and blast furnace gas-fired combustion sources from the final rule, please see the volume of this document titled "Subpart C: General Stationary Fuel Combustion Sources".

Commenter Name: Chris Korleski

Commenter Affiliation: State of Ohio Environmental Protection Agency

Document Control Number: EPA-HQ-OAR-2008-0508-0598.1

Comment Excerpt Number: 4

Comment: Fossil fuel and GHG industrial suppliers will also report GHG emissions using an upstream approach where the owner/operator of a company will report the amount of GHGs emitted based on the CO₂e potential of the quantity of annual fuel supplied by that company to the U.S. economy. The way U.S. EPA has set up this rule there is some double counting for certain fuels. For example, coal suppliers are required to report GHG emissions utilizing the upstream approach and at the same time electric generating units are required to report GHG emissions from burning the same coal, utilizing the downstream approach. U.S. EPA explains in the proposed rulemaking that the agency recognizes this double counting exists and will not sum both reported emissions together. We appreciate U.S. EPA recognizing double counting exists and believe it would be helpful to take advantage of the more detailed data to better assist in future policy developments. We believe this approach is acceptable, however, we ask that U.S. EPA pay special attention to inform the public about how the emissions are accounted for so there is little confusion regarding the total amount of GHG emissions emitted in the U.S. economy.

Response: For the response reporting of upstream and downstream emissions, See the response to EPA-HQ-OAR-2008-0508-0979.1, excerpt 3.

Commenter Name: David Rich

Commenter Affiliation: World Resources Institute (WRI)

Document Control Number: EPA-HQ-OAR-2008-0508-0642.1

Comment Excerpt Number: 5

Comment: WRI agrees with EPA's proposal to cover both downstream emitters and upstream emitters (e.g. fuel suppliers, industrial GHG suppliers, mobile source manufacturers), despite this resulting in double reporting. Different policies will require different types of data. Some policies will target upstream sources; other policies will target downstream sources; and certain policies (e.g. a federal cap-and-trade program) will likely target both types of sources. Collecting both upstream and downstream emissions data will ensure that all future policy options are supported by the necessary emissions data. Therefore, WRI agrees with EPA that it is necessary and appropriate to require reporting from suppliers of coal, coal-based liquid fuels, petroleum products, natural gas and NGLs, industrial GHGs, and CO₂; and manufacturers of mobile sources and engines.

Response: For the response reporting of upstream and downstream emissions, See the response to EPA-HQ-OAR-2008-0508-0979.1, excerpt 3.

Commenter Name: Christina Yagjian

Commenter Affiliation: None

Document Control Number: EPA-HQ-OAR-2008-0508-0212.1m

Comment Excerpt Number: 5

Comment: Other aspects of the proposal which I applaud include its measurement of both upstream and downstream emissions. This will help the EPA capture how greenhouse gases move through the economy, rather than just the end of the supply chains.

Response: For the response reporting of upstream and downstream emissions, See the response to EPA-HQ-OAR-2008-0508-0979.1, excerpt 3.

Commenter Name: John R. Evans

Commenter Affiliation: LyondellBasell Industries

Document Control Number: EPA-HQ-OAR-2008-0508-0718.1

Comment Excerpt Number: 8

Comment: LyondellBasell believes that the proposed rule would result in significant double counting of emissions if implemented as currently written. This would in turn lead to an inaccurate and misleading inventory. Several sections of the proposed Mandatory Reporting Rule overlap and require reporting of potential or phantom emissions which are not actually, but rather, could be emitted. These sections include: subpart KK (supplier of coal); subpart LL (supplier of coal based liquid fuels); subpart MM (suppliers of petroleum products); subpart OO (suppliers of industrial greenhouse gases); and subpart PP (suppliers of carbon dioxide). As currently crafted, the Mandatory Reporting Rule requires that suppliers of coal report CO₂ emissions from what might be the complete combustion or oxidation of all coal supplied. These emissions would overlap completely with emissions reported by all facilities that actually burn coal as fuel. The clearest example of this is the electric generation facilities (covered in subpart D). This would result in a double counting of greenhouse gas emissions. Also, phantom emissions from coal not burned for fuel, but used for other purposes, would also be erroneously reported. Similarly, suppliers of coal based liquid fuels are also required to report CO₂ emissions as if their products were completely combusted or otherwise oxidized. This would again result in the double counting of emissions, first by the supplier of coal based liquid fuels, and again by the entity that actually burned the coal-based liquid fuel. Similar issues arise when quantifying emissions from suppliers of petroleum products and natural gas and natural gas liquids. As required by the proposed mandatory reporting rule, suppliers of these products must report CO₂ emissions as if the products were completely combusted or oxidized, whether they actually are or not. Furthermore, the proposed rule requires that all products, both fuel and recognized feedstock volumes be used to calculate potential CO₂ emissions. There are several problems with this approach. First, the reporting of phantom CO₂ emissions from suppliers of petroleum, natural gas and natural gas liquid fuels will be double counted with the direct emissions reported from those sources who actually combust these products as fuel. Second, reporting phantom emissions from natural gas, natural gas liquids, and petroleum products used as feed stocks assumes the carbon in these product streams will be emitted as greenhouse gasses and does not recognize the fact that they will, in fact, be sequestered in products. The following example illustrates the double (and triple) counting issues associated with the proposed Mandatory Reporting Rule: According to §98.402(a), "Natural gas processing plants must report the CO₂ emissions that would result from the complete combustion or oxidation of the annual quantity of propane, butane, ethane, isobutene and bulk NGLs sold or delivered for use off site." In this particular case, NGL's (raw and fractionated) are imported into a feedstock purification unit in an olefins plant. The purification unit processes the NGL's. Some compounds are sent to the olefins plant as feedstock and some are sold to third parties as either fuel or feedstock depending on current economics. Normally, feedstock is the economically preferred option. If the third party sales go

into the fuel market, the buyer is usually a large fuel supplier or user. Multiple counting of CO₂ occurs in this example as outlined below. The CO₂ from the imported NGL's would be reported by the supplier even though none of this NGL is directly combusted. The CO₂ from processed NGL's and sold as feedstock would also be reported, again, none of the NGL is directly combusted. The CO₂ from the processed NGL's sold as fuel would likely be reported again if sold to another supplier before reaching a customer who would legitimately report CO₂ emissions from the combustion of the fuel. It is clear from this example that the proposed mandatory reporting rule would result in the multiple counting of GHG emissions, producing an inflated and inaccurate inventory. In the proposed rule, EPA also requires that suppliers of industrial GHG and carbon dioxide report emissions as if the total CO₂ production volume were emitted into the atmosphere. Once again, this methodology does not recognize the fact that a majority of the CO₂ produced in an ethylene oxide plant is sold as a product, sequestered into products, and as a result is not emitted into the atmosphere. Due to the identified multiple counting issues associated with requesting emissions data from sources listed in subparts KK through PP, LyondellBasell proposes that only direct emissions be requested and reported in the Mandatory Reporting Rule. Requesting only direct emissions of GHG will result in a more accurate and credible inventory, and will also reduce the administrative and reporting burden on the regulated community.

Response: For the response reporting of upstream and downstream emissions, See the response to EPA-HQ-OAR-2008-0508-0979.1, excerpt 3. See also the responses for comments on subparts LL, NN, MM, PP and OO. At this time EPA is not going final with the coal suppliers' subpart. As we consider next steps, we will be reviewing the public comments and other relevant information. Thus, we are not responding to comments on this subpart at this time.

Commenter Name: Chris Hobson

Commenter Affiliation: Southern Company

Document Control Number: EPA-HQ-OAR-2008-0508-1645.2

Comment Excerpt Number: 7

Comment: Double counting remains an issue that must be effectively addressed so as to devise a credible program. The proposed rule acknowledges double counting and comments that it "does not intend to use the upstream and downstream emissions data as a replacement for the national emission estimates found in the Inventory." Southern Company understands the complexity of this emissions database but feels that the value of the reporting rule results and the overall credibility of any inventory depend on a rigorous resolution of this issue. If the purpose of the reporting rule is to obtain an inventory of greenhouse gas emissions in the U.S. economy that is as accurate as possible, emissions from each source should only be reported once, even if that means not reporting "upstream" and "downstream" emissions in some cases.

Response: For the response reporting of upstream and downstream emissions, See the response to EPA-HQ-OAR-2008-0508-0979.1, excerpt 3. Note that the purpose of this rule is not to prepare a comprehensive national inventory of emissions as the facility level.

Commenter Name: Olon Plunk

Commenter Affiliation: Xcel Energy Inc.

Document Control Number: EPA-HO-OAR-2008-0508-0444.1

Comment Excerpt Number: 5

Comment: Xcel Energy generally supports the proposed rule's economy-wide, facility-based, hybrid system design for reporting direct greenhouse gas emissions and applauds the effort EPA has made to be consistent with generally accepted greenhouse gas accounting practices. Xcel Energy supports EPA's effort to have approximately 85-90% of total direct U.S. greenhouse gas emissions reported through a balance of "downstream" and "upstream" reporting.

Response: EPA thanks the commenter for their input. For the response reporting of upstream and downstream emissions, See the response to EPA-HQ-OAR-2008-0508-0979.1, excerpt 3. The final rule covers approximately 85% of U.S. GHG emissions.

Commenter Name: Shannon Lucas

Commenter Affiliation: Texas Mining and Reclamation Association (TMRA)

Document Control Number: EPA-HQ-OAR-2008-0508-1028.1

Comment Excerpt Number: 3

Comment: Suppliers of coal should not be included as a source category because any reported data would be inherently inaccurate and duplicative of reliable data currently reported by the electricity generation industry. The proposed rulemaking requires coal mines to report the amount of C02 that would be emitted from the combustion of the coal, assuming 100% combustion of the coal. A 100% combustion rate of coal is impossible to achieve at any power plant or other consumer of coal. The data produced by this reporting rule would be inherently inaccurate; TMRA is concerned that the bad data set produced could later be inappropriately used against the coal industry and would run counter 10 the overall goals of this effort. Further, by EPA's own estimates, 99% to 100% of the emissions that would be reported under this rule would be reported by the users of the coal. TMRA believes that any policy justifications for requiring double reporting from the coal mining industry are not supported in light of (1) the regulatory burden placed on this industry and (2) the fact that actual GHG emissions can only be determined by examining the efficiency of the com busting unit. TMRA recommends that the Administrator-consider removing the source category of suppliers of coal (Subpart KK) from the proposed rule.

Response: At this time EPA is not going final with the suppliers of coal subpart. As we consider next steps, we will be reviewing the public comments and other relevant information. Thus, we are not responding to comments on this subpart at this time. For the response on reporting by both upstream and downstream sources, see the preamble section containing responses on source categories to report.

Commenter Name: Lyle Nelson

Commenter Affiliation: WEST Associates

Document Control Number: EPA-HQ-OAR-2008-0508-02280

Comment Excerpt Number: 4

Comment: WEST Associates supports EPA's effort to have reported approximately 90 percent of U.S. greenhouse gas emissions. A balance of downstream and upstream reporting is required

to achieve this coverage. EPA should carefully identify and prevent areas of overlap and duplication between downstream and upstream entity reporting.

Response: For the response reporting of upstream and downstream emissions, see the response to EPA-HQ-OAR-2008-0508-0979.1, excerpt 3. The final rule is estimated to cover approximately 85% of U.S. GHG emissions.

Commenter Name: Rich Raiders **Commenter Affiliation:** Arkema Inc.

Document Control Number: EPA-HQ-OAR-2008-0508-0511.1

Comment Excerpt Number: 2

Comment: We also support EPA's supplier reporting approach, where suppliers of electricity, natural gas, liquid and solid fuels, industrial GHGs, and CO₂ report the amounts of materials they supply into the market that can result in GHG emissions. EPA correctly does not require indirect reporting of consumed energy, such as electricity, natural gas, fuel oil, or coal, instead relying on the entities in the best position to report GHG-related activities to document their direct emissions and market activities. EPA appropriately requires industrial GHG manufacturers and importers, a group including manufacturers of hydrofluorocarbons ("HFC") and perfluorocarbons ("PFC"), to report the amounts of HFCs and PFCs introduced to the market.

Response: EPA thanks the commenter for their input. For the response reporting of upstream and downstream emissions, see the response to EPA-HQ-OAR-2008-0508-0979.1, excerpt 3.

Commenter Name: Benjamin Brandes

Commenter Affiliation: National Mining Association (NMA) **Document Control Number:** EPA-HQ-OAR-2008-0508-0466.1

Comment Excerpt Number: 24

Comment: NMA is concerned that EPA is under the false impression that Congress has affirmatively directed it to require mandatory reporting from all upstream sources of fossil fuels. In fact, Congress has left it to the Administrator to decide if upstream production reporting is appropriate. EPA, however, does not define the term "appropriate" in the preamble, nor does it explain in any detail why the Administrator has determined that requiring data from particular upstream fuel suppliers is reasonable. NMA recognizes that the Administrator has broad discretion in arriving at this determination. NMA believes, however, that the Administrator should provide an explanation and justification of the rationale for applying such broad discretion.

Response: For the response reporting of upstream and downstream emissions, see the response to EPA-HQ-OAR-2008-0508-0979.1, excerpt 3.

Commenter Name: Jesse Prentice-Dunn

Commenter Affiliation: None

Document Control Number: EPA-HQ-OAR-2008-0508-0212.10

Comment Excerpt Number: 4

Comment: By measuring both upstream and downstream emissions, the registry gives the EPA more flexibility in designing compliance strategies.

Response: For the response reporting of upstream and downstream emissions, see the response to EPA-HQ-OAR-2008-0508-0979.1, excerpt 3.

Commenter Name: Chris Korleski

Commenter Affiliation: State of Ohio Environmental Protection Agency

Document Control Number: EPA-HQ-OAR-2008-0508-0598.1

Comment Excerpt Number: 2

Comment: We agree with U.S. EPA's economy-wide approach and believe it is consistent with Congress's intent to require the majority of sources in the U.S. economy. U.S. EPA proposed the best method of economy-wide reporting by requiring facility-level data broken-up by source category for direct GHG emitters, while allowing for the flexibility to report differently for fossil fuel and GHG suppliers as well as motor vehicle and engine manufacturers (e.g., upstream and downstream emissions reporting).

Response: EPA thanks the commenter for their input. For the response reporting of upstream and downstream emissions, see the response to EPA-HQ-OAR-2008-0508-0979.1, excerpt 3.

Commenter Name: Michael A. Caldarera

Commenter Affiliation: National Propane Gas Association (NPGA) **Document Control Number:** EPA-HQ-OAR-2008-0508-1031.1

Comment Excerpt Number: 1

Comment: NPGA supports the proposal in Subparts MM and NN that the compliance requirement for reporting is upstream, either at the natural gas processing facility or the petroleum refiner. As EPA notes in the preamble, by keeping the reporting requirement upstream, it avoids the risk of double counting. From the perspective of a retail propane marketer, it would be completely impractical for EPA to administer the program if the reporting requirement were further downstream because it would substantially increase the universe of reporting entities, which would number in the thousands for the propane industry alone. Also, it would most certainly result in double counting of the fuel by upstream processors or refiners, who will report as both fuel suppliers and direct emitters.

Response: EPA thanks the commenter for their input. For the response reporting of upstream and downstream emissions, see the response to EPA-HQ-OAR-2008-0508-0979.1, excerpt 3. For the response to specific comments on subparts MM and NN, see the preamble sections and comment response documents on these subparts.

Commenter Name: Juanita M. Bursley

Commenter Affiliation: GrafTech International Holdings Inc. Company (GrafTech)

Document Control Number: EPA-HQ-OAR-2008-0508-0686.1

Comment Excerpt Number: 13

Comment: GrafTech agrees it is appropriate to have upstream suppliers of electricity report separately under this rule, because these records should be readily available, this approach will reduce the reporting burden on the downstream consumer, and the possibility of double-counting indirect GHG emissions will be decreased.

Response: For the response reporting of upstream and downstream emissions, see the response to EPA-HQ-OAR-2008-0508-0979.1, excerpt 3.

Commenter Name: See Table 11

Commenter Affiliation:

Document Control Number: EPA-HQ-OAR-2008-0508-0635

Comment Excerpt Number: 40

Comment: We strongly agree with EPA that monitoring both upstream and downstream emissions sources is appropriate for this reporting rule. Congress certainly anticipated as much, writing that EPA was "directed to include in its rule reporting of emissions resulting from upstream production and downstream sources, to the extent that the Administrator deems it appropriate." [footnote: Conf. Report to H.R. 2764 at 1251.] As EPA explains in the preamble, this comprehensive approach is, indeed, appropriate, as it "provides valuable information to EPA and stakeholders in the development of climate change policies and programs." The reporting rule will be used to support a wide array of climate policies at all levels of government. Some policies, including, for instance, low carbon fuel standards, will require upstream reporting. Others will require downstream figures. EPA should collect both to enable governments to develop an efficient mix of policies which, by addressing emissions at various stages in their life cycle, most effectively control them.

Response: For the response reporting of upstream and downstream emissions, see the response to EPA-HQ-OAR-2008-0508-0979.1, excerpt 3.

Commenter Name: Rich Raiders **Commenter Affiliation:** Arkema Inc.

Document Control Number: EPA-HQ-OAR-2008-0508-0511.1

Comment Excerpt Number: 64

Comment: EPA properly includes industrial GHG supply in the proposed reporting rule, and properly includes "downstream" industrial GHG uses, such as packaging, distribution, refrigeration uses, medical uses, recycling, and recovery in the proposed Subpart OO. We support EPA's efforts to track the amount of industrial GHG placed into the stream of commerce, imported and/or exported, converted into other materials, and destroyed.

Response: For the response reporting of upstream and downstream emissions, see the response to EPA-HQ-OAR-2008-0508-0979.1, excerpt 3.

Commenter Name: Kathy G. Beckett

Commenter Affiliation: West Virginia Chamber of Commerce

Document Control Number: EPA-HQ-OAR-2008-0508-0956.1

Comment Excerpt Number: 24

Comment: The West Virginia Chamber is very concerned about the impact this rule could have upon coal production for the state. Issues have been raised by the coal industry concerning double reporting of the CO₂ emissions produced by the combustion of coal and the upstream reporting by coal suppliers of hypothetical GHG emissions. Nearly all of the coal produced in the U.S., will be combusted by large facilities, and therefore nearly all emissions from the entire product will be accurately monitored and reported downstream at the point of combustion. The Chamber supports the position that requiring mandatory reporting of estimated CO₂ emissions from upstream coal suppliers is inappropriate.

Response: For the response reporting of upstream and downstream emissions, see the response to EPA-HQ-OAR-2008-0508-0979.1, excerpt 3. At this time EPA is not going final with the suppliers of coal subpart. As we consider next steps, we will be reviewing the public comments and other relevant information. Thus, we are not responding to comments on this subpart at this time.

Commenter Name: See Table 4

Commenter Affiliation:

Document Control Number: EPA-HQ-OAR-2008-0508-0433.1

Comment Excerpt Number: 13

Comment: Due to the identified multiple counting issues associated with requesting emissions data from sources listed in subparts KK through PP, NPRA proposes that only direct emissions be requested and reported in the Mandatory Reporting Rule. Requesting only direct emissions of greenhouse gases will result in a more accurate and credible inventory and will also reduce the administrative and reporting burden on the regulated community.

Response: For the response reporting of upstream and downstream emissions, see the response to EPA-HQ-OAR-2008-0508-0979.1, excerpt 3. The final rule retains reporting requirements for Subparts LL through PP. EPA is not going final with subpart KK (Suppliers of Coal). As we consider next steps, we will be reviewing the public comments and other relevant information. Therefore, we are not responding to comments on subpart KK at this time.

Commenter Name: Kerry Kelly

Commenter Affiliation: Waste Management (WM)

Document Control Number: EPA-HQ-OAR-2008-0508-0376.1

Comment Excerpt Number: 32

Comment: Waste Management supports the EPA decision to have electricity generators report emissions associated with electricity generation from fossil fuel combustion. The purpose of the MRR is to collect sector-specific emissions data that can be used for understanding relative sector GHG emissions and developing reduction strategies. By requiring "upstream" reporting where emissions are actually produced, EPA will obtain more accurate data, and with less burden on the reporting community.

Response: For the response reporting of upstream and downstream emissions, see the response to EPA-HQ-OAR-2008-0508-0979.1, excerpt 3. For the purposes of this rule, electric generating units as direct emitters are considered "downstream" sources.

Commenter Name: See Table 4

Commenter Affiliation:

Document Control Number: EPA-HQ-OAR-2008-0508-0433.2

Comment Excerpt Number: 16

Comment: Due to the identified multiple counting issues associated with requesting emissions data from sources listed in subparts KK through PP, NPRA proposes that only direct emissions be requested and reported in the Mandatory Reporting Rule. Requesting only direct emissions of greenhouse gases will result in a more accurate and credible inventory and will also reduce the administrative and reporting burden on the regulated community. In the rule preamble, EPA recognizes the potential of emissions double-counting by stating, "There is inherent doublecounting of emissions in a program that includes both upstream and downstream sources." (p. 16466) NPRA believes that the proposed rule would result in significant double-counting of emissions. This would in turn lead to an inaccurate and misleading inventory. Several sections of the proposed Mandatory Reporting Rule overlap and require reporting of potential or presumed emissions which are not actually, but rather could potentially, be emitted. These sections are listed below. 1) Subpart KK – Supplier of Coal 2) Subpart LL – Supplier of Coal Based Liquid Fuels 3) Subpart MM – Suppliers of Petroleum Products 4) Subpart NN – Suppliers of Natural Gas and NGLs (natural gas liquids) 5) Subpart OO – Suppliers of Industrial Greenhouse Gases 6) Subpart PP – Suppliers of Carbon Dioxide As currently crafted, the Mandatory Reporting Rule requires that suppliers of coal report the CO₂ emissions from what might be the complete combustion or oxidation of all coal supplied. These emissions would overlap completely with emissions reported by all facilities that actually burn coal as fuel. The clearest example of this is the electric generation facilities (covered in subpart D). This would result in a double-counting of greenhouse gas emissions. Also, presumed emissions from coal not burned for fuel, but used for other purposes, would also be erroneously reported. Similarly, suppliers of coal-based liquid fuels are also required to report CO₂ emissions as if their product were completely combusted or otherwise oxidized. This would again result in the double-counting of emissions, first by the supplier of coal based liquid fuels, and again by the entity that actually burned the coal-based liquid fuel. Similar issues arise when counting emissions from suppliers of petroleum products, natural gas and natural gas liquids. As required by the proposed mandatory reporting rule, suppliers of these products must report CO₂ emissions as if the products were completely combusted or oxidized, whether they actually are or not. Furthermore, the proposed rule requires that all products, both fuel and recognized feedstock volumes, be used to calculate potential CO₂ emissions. There are several problems with this approach. First, the reporting of presumed CO₂ emissions from suppliers of petroleum, natural gas and natural gas liquid fuels will be doublecounted with the direct emissions reported from those sources that actually combust the fuel. Second, reporting presumed emissions from natural gas, natural gas liquids and petroleum products used as feedstocks assumes the carbon in these product streams will be emitted as greenhouse gases and does not recognize the fact that they will, in fact, be sequestered into products. The following example illustrates the double- (and triple-) counting issues associated with the proposed Mandatory Reporting Rule: According to §98.402(a), "Natural gas processing plants must report the CO₂ emissions that would result from the complete combustion or oxidation of the annual quantity of propane, butane, ethane, isobutene and bulk NGLs sold or

delivered for use off site." In this particular case, NGL's (raw and fractionated) are routed into a feedstock purification unit in an olefins plant. The purification unit processes the NGL's. Some compounds are sent to the olefins plant as feedstock and some are sold to third parties as either fuel or feedstock depending on current economics. Normally, feedstock is the economically preferred option. If the third party sales go into the fuel market, the buyer is usually a large fuel supplier or user. Multiple counting of CO₂ occurs in this example as outlined below. The CO₂ from the routed NGL's would be reported by the supplier even though none of this NGL is directly combusted. The CO₂ from processed NGL's sold as feedstock would also be reported; again, none of the NGL is directly combusted. The CO₂ from the processed NGL's sold as fuel would likely be reported again if sold to another supplier before reaching a customer who would legitimately report CO₂ emissions from the combustion of the fuel. It is clear from this example that the proposed mandatory reporting rule would result in the multiple counting of greenhouse gas emissions, producing an inflated and inaccurate inventory.

Response: For the response reporting of upstream and downstream emissions, see the response to EPA-HQ-OAR-2008-0508-0979.1, excerpt 3. With regard to the example discussed by the commenter, the purpose of this rule is not to prepare a comprehensive national inventory of emissions at the facility level but instead to collect the information necessary for informing policy decisions and evaluating their impact on upstream and downstream sources. EPA is not going final with subpart KK (Suppliers of Coal). As we consider next steps, we will be reviewing the public comments and other relevant information. Therefore, we are not responding to comments on subpart KK at this time. For the response to the comment about the olefin plant example, please see the response to comment EPA-HQ-OAR-0423.2, excerpt 163 in the volume of this document titled "Subpart NN: Suppliers of Natural Gas and Natural Gas Liquids.

Commenter Name: Nancy N. Young

Commenter Affiliation: Air Transport Association of America, Inc. (ATA)

Document Control Number: EPA-HQ-OAR-2008-0508-0522.1

Comment Excerpt Number: 7

Comment: The joint explanatory statement accompanying the Appropriations Act directed the Agency to include in the rule "reporting of emissions resulting from upstream production and downstream sources, to the extent that the Administrator deems it appropriate." That language confirms that it would be appropriate for the Agency to exercise its CAA authority to require reporting of the quantity of fuel or chemical that is produced or imported from upstream sources such as fuel suppliers, as well as reporting of emissions from facilities that directly emit GHGs from their processes or from fuel combustion (downstream sources). Consistent with the appropriations language regarding reporting of emissions from "upstream production," EPA has proposed reporting requirements from upstream suppliers of fossil fuel and industrial GHGs. In the context of GHG reporting, ATA understands "upstream emissions" to refer to the GHG emissions potential of fossil fuel industrial gases supplied to the economy by producers and importers. Given that definition, with respect to fossil fuels it is a reasonable approach to treat reportable emissions in terms of the potential amount of CO₂ that would be produced from complete combustion or oxidation of the carbon in the total quantity of fuel supplied by the producer or importer. The fossil fuels and industrial GHGs supplied by producers and importers are used and ultimately emitted by a large number of small sources, particularly in the commercial and residential sectors (e.g., GHG emissions from individual motor vehicles). To

capture these individual direct emissions sources would require reporting by hundreds or thousands of small facilities. Such an approach would be unworkable as a practical matter and, therefore, ATA agrees that the Proposed Reporting Rule should not include all of those small sources, but instead require reporting by the "upstream" suppliers of fossil fuels and industrial gases. Because the GHGs in these products are almost always fully emitted during use, reporting this "supplier" data should provide the means to develop an accurate estimate of national emissions while substantially reducing the number of reporters. It should be noted that the proposed approach will involve some double-reporting of emissions, as the EPA's program contemplates reporting from both upstream and downstream sources. Nevertheless, this upstream/downstream reporting would be appear to be consistent with the Congressional mandate reflected in the Appropriations Act, and ATA understands the Agency's position that it can provide valuable information to EPA in the development of additional climate change policy and programs. More specifically, policies such as low-carbon fuel standards can only be applied upstream, whereas end-use emission standards can only be applied downstream. Accordingly, ATA agrees that gathering data from both upstream and downstream sources would be necessary to formulate and assess the impacts of such potential policies. Consistent with this, ATA supports the general approach of focusing the proposed downstream component of these reporting requirements for mobile sources on emission rates from new vehicles and engines. Information necessary to formulate any downstream regulatory programs regarding CO₂ emissions can be obtained by extending the current reporting by manufacturers of other pollutants covered by the CAA and doing so would appear to present the least burdens on the regulated community. Those new vehicles and engines will also serve to provide an understanding of in-use activity and total emissions from mobile sources, particularly when considered in light of other existing emissions-related data from States and local governments and mobile source fleet operators.

Response: EPA thanks the commenter for their input. For the response reporting of upstream and downstream emissions, see the response to EPA-HQ-OAR-2008-0508-0979.1, excerpt 3.

Commenter Name: Robert E. Murray

Commenter Affiliation: Murray Energy Corporation

Document Control Number: EPA-HQ-OAR-2008-0508-1577

Comment Excerpt Number: 14

Comment: Coal is unique in this Rule in that both mines and combustors of coal must report their GHG emissions, leading to significant and unnecessary double reporting. This poses a significant problem. First, it assumes that all coal mined is burned. This is not the case. The National Mining Association estimates that a little over ninety-three percent (93%) of coal is combusted for electricity generation. EPA incorrectly assumes that one hundred percent (100%) is used by downstream users in this fashion. The very nature of combusting coal for electricity generating purposes varies widely in efficiency from plant to plant. Downstream entities will have very different numbers from upstream entities such as Murray Energy. When the numbers do not match up, this will result in unnecessary investigations and legal fees on behalf of covered entities and the American taxpayer, and provides little-to-no benefit to the public. This rule also requires Murray Energy to track where our mined coal is being used. This is practically impossible. We have contracts with a number of power-generating entities who operate numerous power plants. When they take delivery of our coal, they alone determine which of their facilities will ultimately receive and later use our coal. After the point of delivery, utilities will

often ship the coal to a different facility than we anticipated. These power generators are not supplied by us exclusively, so it will be even more difficult for upstream and downstream numbers to correspond. The utilities alone are in the only position to know which coal they utilize at which facility, which is the principle determination of the CO₂e. Then there is the inherent problem of double reporting: Having two sets of numbers will only confuse and misinform the general public, businesses and policymakers on the amount of GHGs in our economy. As a mining company, we cannot ensure that our coal is being combusted for electricity or industrial purposes, so our upstream and their downstream numbers will not equate, and those looking at data will assume that they are not double counted. EPA should drop this double-counting and focus entirely at the point of GHG emission for coal combustion.

Response: For the response reporting of upstream and downstream emissions, see the response to EPA-HQ-OAR-2008-0508-0979.1, excerpt 3. With respect to coal suppliers, EPA is not going final with the suppliers of coal subpart at this time. As we consider next steps, we will be reviewing the public comments and other relevant information. Thus, we are not responding to comments on this subpart at this time.

Commenter Name: Karyn Andersen Commenter Affiliation: RR Donnelley

Document Control Number: EPA-HQ-OAR-2008-0508-0345.1

Comment Excerpt Number: 9

Comment: Double counting should not be allowed or avoided when possible. EPA calculations should take into account the possibility for this as proposed in the straightforward accounting method in V.MM.5.

Response: For the response reporting of upstream and downstream emissions, see the response to EPA-HQ-OAR-2008-0508-0979.1, excerpt 3.

Commenter Name: Kyle Pitsor

Commenter Affiliation: National Electrical Manufacturers Association (NEMA)

Document Control Number: EPA-HQ-OAR-2008-0508-0621.1

Comment Excerpt Number: 10

Comment: The NEMA Carbon/Manufactured Graphite EHS Committee agrees it is appropriate to have upstream suppliers of electricity report separately under this rule, because these records should be readily available, this approach will reduce the reporting burden on the downstream consumer, and the possibility of double-counting indirect GHG emissions will be decreased.

Response: For the response reporting of upstream and downstream emissions, see the response to EPA-HQ-OAR-2008-0508-0979.1, excerpt 3.

Commenter Name: Leah Donahey Commenter Affiliation: none

Document Control Number: EPA-HQ-OAR-2008-0508-0620.1

Comment Excerpt Number: 4

Comment: I support the EPA's decision to track global warming pollution through its entire lifecycle by requiring upstream and downstream reporting.

Response: For the response reporting of upstream and downstream emissions, see the response to EPA-HQ-OAR-2008-0508-0979.1, excerpt 3.

Commenter Name: See Table 6

Commenter Affiliation:

Document Control Number: EPA-HQ-OAR-2008-0508-0480.1

Comment Excerpt Number: 9

Comment: INGAA supports the reporting obligations in the Proposed Rule over the alternative structure suggested by EPA, in which double reporting would be eliminated in favor of a combination of upstream fossil fuel reporting and limited downstream emissions reporting. For the reasons discussed in the preamble of the proposed rule, INGAA believes that the proposed reporting structure, which imposes reporting requirements on both downstream and upstream sources, more fairly distributes the regulatory burden than the alternative approach. In addition, as EPA states in the preamble, the proposed approach may provide information about the GHG emissions sources and data accuracy that may be valuable to EPA in formulating GHG policy in the future.

Response: For the response reporting of upstream and downstream emissions, see the response to EPA-HQ-OAR-2008-0508-0979.1, excerpt 3.

Commenter Name: Kevin Wanttaja

Commenter Affiliation: The Salt River Project, WEST (Western Energy Supply Transmission)

Associates

Document Control Number: EPA-HQ-OAR-2008-0508-0343.1

Comment Excerpt Number: 6

Comment: WEST Associates supports EPA's effort to have approximately 90% of total U.S. greenhouse gas emissions reported through a balance of "downstream" and "upstream" reporting. The EPA should carefully identify and prevent areas of overlap and duplication between downstream and upstream entity reporting.

Response: EPA thanks the commenter for their input. For the response reporting of upstream and downstream emissions, see the response to EPA-HQ-OAR-2008-0508-0979.1, excerpt 3. The final rule covers approximately 85 percent of U.S. GHG emissions.

Commenter Name: Noor Osman

Commenter Affiliation: National Petrochemical & Refiners Association

Document Control Number: EPA-HQ-OAR-2008-0508-0220.1

Comment Excerpt Number: 3

Comment: Requiring mandatory annual reporting for downstream facilities that emit GHGs and upstream suppliers of fossil fuels and industrial GHGs is an important step towards regulating GHG emissions in the United States.

Response: EPA thanks the commenter for their input. For the response reporting of upstream and downstream emissions, see the response to EPA-HQ-OAR-2008-0508-0979.1, excerpt 3.

Commenter Name: Lindsay Moseley Commenter Affiliation: Sierra Club

Document Control Number: EPA-HQ-OAR-2008-0508-0212t

Comment Excerpt Number: 3

Comment: In the 2008 Appropriations Act, Congress made it clear that EPA should require appropriate reporting of both upstream and downstream emissions, thereby capturing how greenhouse gases move throughout the economy, rather than just at the end of supply chains. As EPA explains in the Registry Rule Preamble, this fuller view, looking, for instance, both to fossil fuel suppliers and to end users, will provide valuable information as it designs compliance strategies. In some cases, it will be more efficient to regulate suppliers and other users. With this information, EPA can readily make those determinations.

Response: EPA thanks the commenter for their input. For the response reporting of upstream and downstream emissions, see the response to EPA-HQ-OAR-2008-0508-0979.1, excerpt 3.

Commenter Name: Renae Schmidt

Commenter Affiliation: CITGO Petroleum Corporation

Document Control Number: EPA-HQ-OAR-2008-0508-0726.1

Comment Excerpt Number: 30

Comment: EPA has built a system of double, triple and even quadruple counting into the rule as proposed, including the ill advised reporting of non-combusted carbon and carbon that is safely sequestered in commercial, industrial and consumer products. Take as an example a petroleum feedstock that is sold to another petroleum company. Carbon from that feedstock is inventoried when it leaves its original facility, whether or not it is destined to be combusted. If it goes into another unit elsewhere as feed for additional processing, if can either become another feedstock to be marketed or turned into a final product. In the final product case, it may or may not be combusted. If it is feed for an industrial product, chances are that it will never be combusted, but it's carbon will be counted at least twice. If the original base material for the feedstock was imported, it will have at least triple counting. We cannot afford to play fast and loose with accounting for carbon emissions from petroleum products because of the magnitude of petroleum that passes throughout the US from both domestic and other sources. A great deal of the petroleum processed in the US never becomes a fuel, much of it going into goods such as plastics, medicines, industrial intermediates and construction materials. Counting all of these uses as C02e emissions does a disservice to every citizen of this country. CITGO urges EPA to consider inventorying only those final products that are destined for combustions as fuels, and only when they leave their final processing step as gasoline, distillate, aviation, bunker or coke fuels.

Response: For the response reporting of upstream and downstream emissions, see the response to EPA-HQ-OAR-2008-0508-0979.1, excerpt 3. For the response on collecting data on products with potentially non-emissive uses, please see the Sections III.M.3 and III.N.3 of the preamble.

Commenter Name: Mary Munn

Commenter Affiliation: Fond du Lac Band of Lake Superior Chippewa

Document Control Number: EPA-HQ-OAR-2008-0508-0596

Comment Excerpt Number: 5

Comment: Care should be taken to evaluate many of the processes covered in terms of lifecycle GHG emissions and to avoid double counting of emissions

Response: For the response reporting of upstream and downstream emissions, see the response to EPA-HQ-OAR-2008-0508-0979.1, excerpt 3. While we are not requiring evaluation or reporting of life-cycle emissions under this rule, EPA recognizes that life cycle analyses can be useful for many purposes such as determining a facility's or product's overall carbon footprint. Further, availability of upstream and downstream data collected under this rule can help inform and improve life cycle and other analyses.

Commenter Name: Thomas W. Easterly

Commenter Affiliation: Indiana Department of Environmental Management (IDEM)

Document Control Number: EPA-HQ-OAR-2008-0508-0525.1

Comment Excerpt Number: 25

Comment: The proposed rule requires manure management systems that emit methane and nitrous oxide in amounts equivalent to 25,000 MMT CO₂e or more per year to report their GHG emissions. Most all other agricultural sources, other land uses and land-use changes are not required to report under this proposed rule. Indiana believes that all agricultural processes should be exempt from this proposed reporting rule. Depending on the benefits associated with the initial reporting results from the largest fossil fuel based GHG emitters, additional sources and sectors could be required to report at a later date.

Response: We received several commenters regarding the coverage of emissions agriculture and forestry source categories in the rule. Many commenters agreed with the proposal's exclusion of reporting for emissions from enteric fermentation, fertilizer application on agricultural soils, and forestry. Other commenters noted that emissions and sequestration in the agriculture and forestry sectors are large and that it would be very valuable to obtain better data from facilities. EPA has reviewed all of the comments and determined that the final rule should retain the approach taken at proposal.

Reporting of emissions associated with manure management are required to be reported subject to the requirements in Subpart JJ. Practical methodologies are available for calculating GHG emissions from this source category, and requiring reporting by facilities that are above the threshold is consistent with requirements for other source categories covered by the rule. See the preamble section and comment response document volume on Subpart JJ, Manure Management for responses to specific comments on manure management GHG calculation and reporting.

The rule does not require reporting of GHG emissions from enteric fermentation, rice cultivation, field burning of agricultural residues, composting (other than as part of a manure management system), agricultural soil management, or other land uses and land-use changes, such as emissions associated with deforestation, and carbon storage in living biomass or harvested wood products. These source categories are excluded from reporting because currently available reporting methods for facility-level emissions for these sources can be difficult to implement, expensive, and/or yield uncertain results.

The decision to exclude reporting of carbon sequestration, please see the preamble to this section, Source Categories to Report. We also acknowledge a comment offered regarding the availability of methods under DOE's 1605(b) program for the reporting of sequestration from forestry projects. This DOE program remains in effect, and interested parties can participate in the program for the reporting of such emissions.

Several commenters specifically commented on the exclusion of enteric fermentation under the rule. Many supported our determination that the available methodologies were uncertain and burdensome for livestock producers. Other commenters noted that this is a large source of emissions, both in the US and globally, and that reporting could help encourage emission reductions. Upon review of these comments, we still determine that the methodologies are uncertain, variable and burdensome for reporters. We retain the flexibility to revisit this issue, but are not requiring reporting from this source category in this rule.

We also received cmments on the coverage of nitrous oxide from soils. Most commenters supported our decision to exclude the reporting of the N_2O emissions related to the land application of fertilizer. Some commenters supported our decision to collect data on the production of fertilizer, as described in Volume 13 (Subpart A: Content of the Annual Report, the Abbreviated Emission Report, Recordkeeping, and Monitoring Plan) of this document. The final rule retains the approach included in the proposal.

Commenter Name: Roni Neff

Commenter Affiliation: Johns Hopkins University Bloomberg School of Public Health

Document Control Number: EPA-HQ-OAR-2008-0508-0595

Comment Excerpt Number: 7

Comment: The EPA proposes to collect data from CAFOs with manure management systems having emissions over 25,000 mt CO₂e per year, and states that other agricultural sources are excluded due to the challenges in estimating emissions, and due to the many small emitters. We are concerned that such exclusions contribute to the ongoing problem of under-recognition of the significance of impacts of industrial food animal production on climate change. [Footnote:Neff RA, Chan IL, Smith KC. Yesterday's dinner, tomorrow's weather, today's news?: US newspaper coverage of food system contributions to climate change. Public Health Nutr. 2008 Aug 15:1-9.] If "what is not measured is not managed," these data gaps can contribute to ongoing emissions and a failure to adequately address these quite significant GHG sources. Collecting data would facilitate inclusion of the measured sources in GHG mitigation policy, and could also provide increased incentive to convert to agricultural production methods known to reduce GHGs, such as organic methods; it could also stimulate innovation. Data collection can provide a baseline for evaluating and monitoring future emissions reductions strategies. Further, because historically there has been far less attention given to these agricultural sources than others, there may be

more untapped opportunities available. We also question the strategy of applying the 25,000 mt CO_2e per year threshold to only one aspect of a facility's operations. Given that agricultural operations tend to have multiple emissions sources, while other industries' emissions structure may be simpler, the policy may effectively create a higher threshold in agriculture than in other industries. The current proposal excludes multiple agricultural source categories. We would like to comment in particular on the proposed exclusion of GHGs from enteric fermentation and from "agricultural soil management or other land uses and land use changes." The proposed rule indicates that agricultural soil management contributes 3.8 percent of greenhouse gas emissions, while enteric fermentation contributes 1.8 percent. These categories are thus significant contributors to the nation's greenhouse gas emissions, and should be counted to the extent feasible, with investments made to improve methods rapidly. Some commenters may question whether manure, enteric fermentation or other emissions associated with animal agriculture are anthropogenic; we emphasize the dramatic increases in numbers of cattle across time due to human food choices. Cattle in operations large enough to be included in this rule exist only due to human decisions surrounding diet and food production.

Response: See the response to comment EPA-HQ-OAR-0508-0525.1, excerpt 25.

Commenter Name: Justin Oldfield

Commenter Affiliation: California Cattlemen's Association (CCA) Document Control Number: EPA-HQ-OAR-2008-0508-0383

Comment Excerpt Number: 7

Comment: CCA strongly agrees with EPA's assessment that GHG emissions from enteric fermentation are not anthropogenic in nature and should not be included in the proposed rule. Methane emissions from all ruminant animals are an active part of the biological and digestive process. Beef producers already feed and produce livestock as efficiently as possible, maximizing weight gain thereby reducing methane emissions in the long term. As new research becomes available, producers will continue to voluntarily alter diets that maximize efficiency while not jeopardizing cost efficiency and nutrition.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0525.1, excerpt 25. To clarify, although this rule is not requiring reporting of emissions from enteric fermentation of ruminant animals, this is not because these emissions are considered "natural". The emissions of enteric fermentation from cattle and other livestock are considered anthropogenic under the U.S. Greenhouse Gas Inventory and the Intergovernmental Panel on Climate Change National GHG Inventory Programme.

Commenter Name: Stephen E. Woock

Commenter Affiliation: Weyerhaeuser Company

Document Control Number: EPA-HQ-OAR-2008-0508-0451.1

Comment Excerpt Number: 15

Comment: Weyerhaeuser agrees with and supports EPA's decision to exclude agriculture and other land uses such as forestry activities, from reporting GHG emissions. First and foremost, forests and the wood products produced from them are a net sink in the US, currently offsetting 10-15% of US GHG emissions. Secondly, the scale of ownership would make it an impractical

administrative burden to require reporting of emissions from these sources -almost 60%, or 430 million acres of US forests, are owned by over 10 million private landowners. In addition, forestry activities must be excluded from reporting since estimating facility-level emissions would be difficult to implement and would not be likely to produce valuable results because: 1. These sources do not have GHG emission measurement methods that are available, except for research methods that are prohibitively expensive and require sophisticated equipment to run. 2. There is only limited modeling-based methods that use general emission factors and large-scale models have been primarily developed only for voluntary GHG reporting. 3. To calculate emissions using emission factor or carbon stock change approaches, the landowner would be required to report on management practices and a variety of other data inputs that may not exist. Activity data collection and emission factor development necessary for emissions calculations at the scale of individual reporters would become complex and costly for very little benefit. 4. While some activity data can be collected with reasonable certainty, the emissions estimates could still have a high degree of uncertainty because the emission factors available for individual reporters do not reflect the variety of conditions (e.g., soil type, moisture) that need to be considered for accurate estimates. 5. The administrative burden of having to monitor and report annual carbon changes would be overwhelming and would have no measurable climate benefit since one of the main reasons US forests remain productive is because there is an economic value for managing forests for timber production. Year-to-year accounting is impractical and economically infeasible for most landowners. We note that the emissions from fossil fuel use by forestry mechanical equipment and rolling stock will be counted in the upstream fuels supply chain. Without reasonably accurate facility-level emissions factors and the ability to accurately measure all facility-level calculation variables at a reasonable cost to reporters, facility-level emissions reporting would not improve the knowledge of GHG emissions relative to national or regional-level emissions models and data available from national databases. A measurement program for these types of sources is technically difficult and expensive to implement, and would be better accomplished through an empirical research program that establishes and maintains rigorous measurements over time. Therefore, Weyerhaeuser fully agrees with EPA to exclude the forestry sector from reporting GHG emissions.

Response: EPA thanks the commenter for their input. See the preamble section on source categories to report, as well as response to comment EPA-HQ-OAR-2008-0508-0525.1, excerpt 25.

Commenter Name: Ryan K. Miltner

Commenter Affiliation: Miltner Law Firm, LLC

Document Control Number: EPA-HQ-OAR-2008-0508-0508.1

Comment Excerpt Number: 10

Comment: EPA's decision to not require reporting from enteric fermentation is sound. As DPNM stated in its comments on EPA's ANPR on Greenhouse Gas Emissions under the Clean Air Act, the enteric fermentation that naturally occurs in cows is neither anthropogenic nor is it likely to be remediated. It is worth noting, however, that as technology has permitted more efficient production of milk, the carbon-footprint of a gallon of milk has been reduced by 70% since 1940.

Response: EPA thanks the commenter for their input. See the response to comment EPA-HQ-OAR-2008-0508-0525.1, excerpt 25. Regarding whether emissions from enteric fermentation are natural, please see the response to comment EPA-HQ-OAR-2008-0508-0383, excerpt 7.

Commenter Name: Justin Oldfield

Commenter Affiliation: California Cattlemen's Association **Document Control Number:** EPA-HQ-OAR-2008-0508-0228b

Comment Excerpt Number: 1

Comment: It should be noted that all of agriculture accounts for less than 7 percent of our nation's greenhouse gas inventory. Agriculture, including livestock production, is a minor source of emissions, but is also unique in that it also provides numerous sequestration benefits.

Response: See the responses to comments EPA-HQ-OAR-2008-0508-0525.1 excerpt 25.

Commenter Name: Roni Neff

Commenter Affiliation: Johns Hopkins University Bloomberg School of Public Health

Document Control Number: EPA-HQ-OAR-2008-0508-0595

Comment Excerpt Number: 6

Comment: There is substantial evidence that the food and agriculture sector, particularly industrial food animal production, is responsible for a substantial segment of national greenhouse gas emissions. The United Nations Food and Agriculture Organization estimates that 18 percent of world greenhouse gas emissions come from the livestock sector alone, [Footnote: U.N. FAO Livestock's Long Shadow. 2006.] while within the U.S., nearly half of food-related greenhouse gas emissions may come from meat and dairy. [Footnote: Weber/Saunders in ES&T, 2008] EPA's proposed data collection will represent a step forward in monitoring emissions from this sector.

Response: EPA thanks the commenter for their input. See the preamble section on manure management for responses on reporting from this source category. Regarding other agricultural source categories, see the response to comment EPA-HQ-OAR-2008-0508-0525.1, excerpt 25.

Commenter Name: Roni Neff

Commenter Affiliation: Johns Hopkins University Bloomberg School of Public Health

Document Control Number: EPA-HQ-OAR-2008-0508-0595

Comment Excerpt Number: 8

Comment: We recognize the significant current challenges in arriving at consistent estimates in soil emissions, given variety in area conditions and agricultural methods. The proposed rule indicates that measurement of fertilizer emissions would be "better accomplished through an empirical research program that establishes and maintains rigorous measurements over time." We urge that a cooperative research program be instituted between EPA and USDA, with a varied, geographically-based national sampling scheme. The research program should address the dual aims of a) refining measurement and estimation methods to enable future counting; and b) strengthening estimates of greenhouse gas emissions not counted through this inventory. The

latter will ensure that the contribution of these agricultural sources will be recognized and subsequently represented in future uses of the new inventory. We also emphasize that research serves a different function from a national reporting system; it should be a goal to have both. As an interim strategy, EPA's idea to use fertilizer data from manufacturing, wholesale, distribution and importers will be valuable.

Response: The reporting of fertilizer data is retained in the final rule. For additional information, see Volume 13 (Subpart A: Content of the Annual Report, the Abbreviated Emission Report, Recordkeeping, and Monitoring Plan) of this document.

Commenter Name: Bill Grygar

Commenter Affiliation: Anadarko Petroleum Corporation **Document Control Number:** EPA-HQ-OAR-2008-0508-0459.1

Comment Excerpt Number: 14

Comment: The proposed rule impacts the oil and natural gas industry through the requirements of reporting both as facility operators and fuel suppliers. This creates a disproportionate regulatory burden and compliance costs on the oil and natural industry when compared to other industry sectors that have to report their GHG emissions only or others that have been almost totally excluded from reporting. For example, EPA should broaden the scope of the rule to more comprehensively include agricultural activities, a major GHG sector, to ensure sufficient information is available to inform policy decisions. While EPA's intent with the rule is to inform future policy decisions, the proposed rule is inconsistent with regards to sectors covered and reporting details required. Some industries require reporting by type of process unit with detailed information. On the other hand, the agricultural sector, which is responsible for 6% of U.S. GHG emissions, has only a small portion (manure management) covered by the rule. Per EPA's technical support document, manure management represents only 14% of the agricultural sector. The major agricultural sectors, enteric fermentation (34%) and soil management (50%) are not included in the rule. While EPA points out the challenges associated with collecting this information (primarily that practical reporting methods to estimate facility-level emissions for these sources can be difficult), the rule could seek more simplified approaches to including this information in the reporting rule. Also, placing a focus on the agricultural sector will facilitate the development of improved estimating methodologies. EPA could also consider using information from the Inventory of U.S. Greenhouse Gas Emissions and Sinks to ensure the GHG reporting rule provides the comprehensive information Congress is seeking.

Response: With respect to agricultural activities, see the response to comment EPA-HQ-OAR-2008-0508-0525.1, excerpt 25. For the response on reporting by both upstream and downstream sources, see the preamble section containing responses on source categories to report. At this time EPA is not going final with oil and natural gas systems subparts. As we consider next steps, we will be reviewing the public comments and other relevant information. Thus, we are not responding to comments on this subpart at this time.

Commenter Name: Sean M, O'Keefe

Commenter Affiliation: Hawaiian Commercial and Sugar Company (HC&S)

Document Control Number: EPA-HQ-OAR-2008-0508-1138.1

Comment: A&B concurs with EPA's proposal to exclude most agricultural sources and other land uses from reporting. As indicated in the preamble, practical reporting methods to estimate facility-level emissions for most agricultural sources can be difficult to implement and can yield uncertain results that would not necessarily contribute to improved knowledge of GHG emissions relative to existing databases and models. Moreover, it is anticipated that for most agricultural sources reporting would be exceptionally complex and costly for farmers to implement. Agricultural sources are characterized by a large number of small emitters, and for most of these sources no facilities would exceed the reporting thresholds proposed. For these reasons, EPA should exclude agricultural and other land use sources from reporting, as proposed.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0525.1, excerpt 25.

Commenter Name: See Table 10

Commenter Affiliation:

Document Control Number: EPA-HQ-OAR-2008-0508-0425.1

Comment Excerpt Number: 6

Comment: When determining the total GHG emissions subject to reporting requirements under the proposed rule, CLA supports EPA's proposed exemption of enteric methane from inclusion in determining the reported quantity of GHGs emitted from a facility. Enteric methane results from the natural function of microbes in the rumen of all ruminating animals, including cattle and many forms of wildlife. Currently, there is no way to reduce emissions of enteric methane and, as such, these emissions should not be considered as anthropogenic or controllable. Therefore, there is no rationale for reporting such emissions. CLA requests that EPA also specifically exempt respiratory carbon dioxide (CO₂) from reporting requirements. As with enteric methane, respiratory CO₂ is the result of natural metabolic and respiratory processes and should neither be controlled nor reported. In order to avoid future legal questions and challenges regarding the intention of the proposed reporting requirement, CLA deems that it would be prudent for EPA to specifically exempt these emissions from the proposed reporting requirement.

Response: The final rule does not cover respiratory CO₂, so no exemption is needed. Facilities are only required to report emissions from source categories for which a methodology is provided in this rule. There is no methodology provided for CO₂ emissions from respiration. While we do not necessarily agree with the commenter's statements about enteric and other emissions, at this time EPA is only requiring reporting from manure management systems. We are not exempting or otherwise commenting on other agricultural emissions at this time. However, we will be considering comments on this subject as we continue to assess possible future Climate Change policies. See also the responses to comments EPA-HQ-OAR-2008-0508-0525.1, excerpt 25, EPA-HQ-OAR-2008-0383, excerpt 7, and EPA-HQ-OAR-2008-690.1, excerpt 1.

Commenter Name: See Table 10

Commenter Affiliation:

Document Control Number: EPA-HQ-OAR-2008-0508-0395.1

Comment: We concur with EPA's justification to exclude N_2O emissions from fertilizer application and fields. As stated in the proposal, "there are no direct greenhouse gas emission measurement methods available except for research methods that are prohibitively expensive and require sophisticated equipment." The ability to obtain economically feasible facility-by-facility estimates of N_2O emissions from fields does not exist today. In addition, it should be noted that food production is an essential part of maintaining human life. Without it, humans would perish from the Earth. Economical and plentiful food production in amounts sufficient to feed the world is only possible as a result of modern production agriculture. Greenhouse gas emissions from fertilizer application and soil management are a reality that cannot be overcome. Requiring food producers to report emissions would be cost prohibitive, and controlling such emissions is currently impossible. If there ever comes a day when sufficient quantities and types of food can be grown in economical and non-greenhouse gas producing ways, our producers would be interested in learning how to do so.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0525.1, excerpt 25.

Commenter Name: Brandy Carter

Commenter Affiliation: Kansas Cattlemen's Association (KCA) **Document Control Number:** EPA-HQ-OAR-2008-0508-1570

Comment Excerpt Number: 1

Comment: In regards to the possibility of regulating and/or taxing green house gas emissions from livestock under the Clean Air Act, we found it urgent to contact you. At present time, there is no internationally recognized set of standards available to measure livestock emissions. Therefore, how can you implement regulations and/or taxes without accepted guidelines to follow? Until such time comes, it is irresponsible for the EPA to consider the possibility of regulating green house gas emissions from livestock sources. Enteric fermentation is a normal digestive process where microbial populations in the digestive tract break down food and cause animals to excrete CH₄ gas as a by-product. CH₄ is then emitted from the animal to the atmosphere thorough exhaling or eructation. These naturally occurring emissions do not endanger public health. Emissions from all agricultural sources are minimal, 6,4 % of the Total U.S. emissions In fact, due to land use for agriculture, producers provide a benefit to the environment.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0525.1, excerpt 25. Note that the reporting of emissions from enteric fermentation in livestock is not required. Regarding the comment on regulating or taxing emissions from livestock, this rule only requires reporting of GHG emissions from specified source categories to collect data on GHG emissions to help inform future climate policy development. The rule does not regulate emissions, require emissions reduction, or tax GHG emissions.

Commenter Name: D. Lawrence Zink

Commenter Affiliation: Montana Sulphur & Chemical Company Inc. (MSCC)

Document Control Number: EPA-HQ-OAR-2008-0508-0505.1

Comment: How is land management dealt with? Major sources of CO₂e arise cumulatively from these activities on lands owned by public and private entities. How can fair or effective climate change policy be developed by looking at only a small portion of the emissions? For example: 1. Controlled production and burning of vegetation/wastes on lands managed by numerous entities public and private, producing large volumes of anthropogenic CO₂, methane and soot from actively managed or cropped lands. 2. Land management practices, including wilderness and parkland, allowing and promoting the propagation of range and forest fire fuels and the inevitable resultant fires -- producing large volumes of anthropogenic CO₂ and soot. 3. Coal seam fires and methane releases allowed on and under lands not presently engaged in coal mining or CBM development. 4. Coal seam fires and methane releases on and under lands engaged in mining of coal or CBM development. 5. Wetlands management and policy affecting both public and private lands, and tidal areas, actively encouraging the preservation and/or expansion of the generation and release of methane and CO2 gases. If the premise is accepted that the effects of these gases is global, enduring, and 'climatic' rather than local, then it makes no sense from a health and welfare perspective to distinguish between large, concentrated, sources, vs. numerous small sources or large diffuse sources. A pound of CO₂ or methane emitted from a campfire, ranch, or swamp is as potent (or impotent) as a pound emitted from the largest cement kiln or forest fire. Better to account for these emissions from major commercial carbon-based fuels one time at the commercial source(s) (or point of importation) of those fuels, and to account for non-commercial and non-fuel emissions by special type (wetland, landfill, sewage plant, septic tank, coal seam, cement kiln, head of livestock, etc.), and to account for sequestration, heat-efficiency, conservation, and reduction successes through direct incentives for "above average" performance that will encourage both innovation and voluntary reporting.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0525.1, excerpt 25, and the preamble section containing responses on source categories to report. Reporting is note required for coal seam fires; no methodology is provided in the rule. Regarding reporting of emissions from underground coal mines, EPA is not going final with subpart FF (Underground Coal Mines). As we consider next steps, we will be reviewing the public comments and other relevant information. Therefore, we are not responding to comments on these subparts at this time. Reporting is also not required for emissions from wetlands; no methodology is provided in the rule.

Commenter Name: See Table 10

Commenter Affiliation:

Document Control Number: EPA-HQ-OAR-2008-0508-0395.1

Comment Excerpt Number: 7

Comment: TCFA strongly supports EPA's decision not to require reporting of GHG emissions from enteric fermentation. We agree with statements in the proposed rule clarifying that enteric fermentation is NOT considered an anthropogenic emission source. Enteric fermentation produces methane as a by-product of a natural digestive process in herbivores in which microorganisms break down carbohydrates for absorption into the bloodstream of the animal. EPA acknowledges in the "Technical Support Document for Biologic Process Sources Excluded from this Rule," February 4, 2009 that there are only two approaches for monitoring methane emissions from enteric fermentation: direct measurement and modeling. "Since direct measurement is prohibitively expensive and overly burdensome for reporters, modeling enteric emissions with emission factors is the only reasonable alternative." Id. at p. 6. But EPA states

that modeling can result in a high degree of uncertainty due to overestimating variables by 50% or underestimating by 33%. Id. Such uncertainty would produce results in which the EPA and industry could not be confident, and would therefore not be appropriate.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0425.1, excerpt 6. Regarding whether emissions from enteric fermentation are natural, please see EPA-HQ-OAR-2008-0508-0383, excerpt 7.

Commenter Name: Arthur N. Marin

Commenter Affiliation: Northeast States for Coordinated Air Use Management (NESCAUM)

Document Control Number: EPA-HQ-OAR-2008-0508-0556.1

Comment Excerpt Number: 4

Comment: EPA should develop a GHG reporting program that has the following attributes: Includes data that characterize less "traditional" GHG sources: EPA should not limit its reporting program to an Acid Rain model, as it has proposed. By focusing primarily on traditional stationary sources, EPA would be limiting the scope of its abilities to recognize promising GHG mitigation opportunities in the future. We urge EPA to partner with The Climate Registry and other agencies to evaluate data that characterize other sectors, such as the commercial and land use (i.e., agriculture and forestry) sectors that fall outside traditional criteria pollutant reporting but could be critical to the success of GHG policy. Specifically, EPA should explore partnering with The Climate Registry with respect to assessing emissions data from facilities that fall below EPA's proposed and final emissions thresholds. While these facilities are small emitters under current economic conditions, some will grow to become major emitters in the future. Moreover, early monitoring of changes in emissions trends in these emerging sectors may help policymakers to begin benchmarking emerging sectors and to better anticipate structural changes in the economy in order to plan for changes in climate mitigation policies accordingly.

Response: The final rule covers 31 source categories and is much broader than the acid rain program. The source categories covered are those that emit the highest amounts of GHG emissions, have individual facilities about the thresholds, and for which relatively accurate GHG measurement and calculation methodologies are available. The data collected under this rule will help us develop a comprehensive and accurate database to inform CAA climate change decisions. See the preamble for source categories to report and comment EPA-HQ-OAR-2008-0508-0525.1, excerpt 25 regarding agriculture in particular. There are also several proposed source categories that EPA is still in the process of evaluating, and we retain the flexibility to develop reporting for other source categories as our policy needs warrant.

For the response to the comment on the TCR, see Section II.O of the preamble and Volume 6 (Relationship to Other GHG Reporting Programs).

Commenter Name: Roni Neff

Commenter Affiliation: Johns Hopkins University Bloomberg School of Public Health

Document Control Number: EPA-HQ-OAR-2008-0508-0595

Comment Excerpt Number: 11

Comment: As for the exclusion of enteric fermentation emissions, the main relevant point we took from the TSP was that although estimation methods exist, there could be substantial

uncertainty in estimates even from feedlot cattle, including due to variation in feed intake and CH₄ conversion rates. We question whether it would be possible to average those variations across a large feedlot to derive reasonably acceptable figures. Given the importance of the emissions, we urge EPA to consider including enteric fermentation emissions in reporting, or at least to include a rough estimate of these in selecting facilities that meet the reporting threshold. At minimum we urge EPA to support a research program to enable improvement of measurement methods.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0525.1, excerpt 25. We retain the flexibility to develop reporting for other source categories as our policy needs warrant.

Commenter Name: Jeff A. Myrom

Commenter Affiliation: MidAmerican Energy Holdings Company **Document Control Number:** EPA-HQ-OAR-2008-0508-0581.1

Comment Excerpt Number: 16

Comment: MidAmerican submits that N₂O from agriculture is a significant source of GHG emissions and should be reasonably estimated where possible.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0525.1, excerpt 25.

Commenter Name: Sofia Sarabia

Commenter Affiliation: Center on Race, Poverty & the Environment (CRPE)

Document Control Number: EPA-HQ-OAR-2008-0508-0456.1

Comment Excerpt Number: 1

Comment: We urge the EPA to include methane (CH₄) from enteric emissions in the Proposed Mandatory Greenhouse Gas Reporting Rule. As the EPA is aware, methane is an extremely potent greenhouse gas that has 23 times greater global warming potential than carbon dioxide. [Footnote: Koneswaran, Gowri and Nierenberg, Danielle, Global Farm Animal Production and Global Warming: Impacting and Mitigating Climate Change (Environmental Health Perspectives, Januaty 31, 2008), p. 5. See DCN:EPA-HQ-OAR-2008-0508-0456.2 for attachment] Enteric emissions are the major source for methane production in industrial dailY operations. [Footnote: Mitloehner, Frank, Volatile Fatty Acids, Amine, Phenol, and Alcohol Emissions/rom Dairy Cows and Fresh Waste, Final Report (May 31, 2006), pp. 15, 39. See DCN:EPA-HQ-OAR-2008-0508-0456.3 for attachment] The Proposed Rule only requires reporting on manure management and therefore will not capture a major or source of greenhouse gas emissions on industrial farm operations. Enteric emissions are released by cows and other ruminants during their digestive process. Methane is produced during microbial (enteric) fermentation and released during eructation. Based on EPA's own agricultural greenhouse gas inventory, enteric fermentation is responsible for nearly three times more carbon dioxide equivalent than manure management: 12,360 thousand tons from enteric fermentation versus 4,550 thousand tons from manure management. [Footnote: Putting Meat on the Table: Industrial Farm Animal Production in America, Report of the Pew Commission on Industrial Farm Animal Production, p. 27, see table. See DCN:EPA-HQ-OAR-2008-0508-0456.4 for attachment] Yet, the Proposed Rule only requires the agriculture industy to report on the emissions from manure

management. As such a significant source of a powerful greenhouse gas, reporting on the enteric emissions of methane must be included in the proposed rule. Enteric fermentation generates approximately 86 million tonnes of methane emissions worldwide and we urge the EPA to include this significant methane source in the Proposed Mandatory Greenhouse Gas Reporting Rule.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0525.1, excerpt 25.

Commenter Name: C. T. Ferguson **Commenter Affiliation:** None

Document Control Number: EPA-HQ-OAR-2008-0508-0168

Comment Excerpt Number: 3

Comment: The proposed rule does not require Dairy or Beef producers to report enteric fermentation emissions of methane. Reporting of methane emissions from natural digestive processes of cattle should strongly be considered in this proposal. Per the statement of the senior UN Food and Agriculture Organization (FAO) official, Mr. Henning Steinfeld, "Livestock are one of the most significant contributors to today's most serious environmental problems." According to the United Nations 2006 report, cattle-rearing generates more global warming greenhouse gases, as measured in CO₂ equivalent, than transportation/motor vehicles. Considering this, the adequate monitoring and reporting of greenhouse gases from livestock producers is imperative to underscore, and reduction in these gases, to include reducing the numbers of livestock grown in the United States should be strongly supported by the EPA and individual states within the nation.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0525.1, excerpt 25.

Commenter Name: Anonymous public comment

Commenter Affiliation: None

Document Control Number: EPA-HQ-OAR-2008-0508-0182

Comment Excerpt Number: 1

Comment: The majority of greenhouse gases, originating in the United States(80%), has an agricultural, poultry, and livestock source. Failure to mandate the reporting of these sources makes the report totally useless, as a tool for evaluating Congressional action to address this planetary issue.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0525.1, excerpt 25. Note that agriculture emissions are approximately 7 percent of total US emissions (not 80% as mentioned by the commenter.) In addition, note that EPA's regulatory impacts analyses show that the facilities and suppliers covered by the rule represent approximately 85% of U.S. GHG emissions.

Commenter Name: See Table 3

Commenter Affiliation:

Document Control Number: EPA-HQ-OAR-2008-0508-0440.1

Comment Excerpt Number: 5

Comment: The proposal does not require reporting GHG emissions from enteric fermentation, composting (other than as part of a manure management system), or agricultural land uses, such as manure fertilizer applications (74 Fed. Reg. 16466). These variables should be included in any rule that is published, as the proposal to require reporting should be based on actual emissions rather than on a capacity based potential-to-emit basis (74 Fed. Reg. 16463). Requiring the reporting of actual emissions will provide EPA with more accurate data.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0525.1, excerpt 25.

Commenter Name: See Table 11

Commenter Affiliation:

Document Control Number: EPA-HQ-OAR-2008-0508-0635

Comment Excerpt Number: 55

Comment: While EPA does not currently propose to cover other GHG emission sources associated with agriculture, emissions of methane from ruminant animals via enteric fermentation account for a large portion of agriculture sector emissions. [footnote: 316 According to the EPA, GHG emissions from livestock enteric fermentation accounted for 139 MMt CO₂e in 2007, or roughly 70% of total livestock emissions. Source: EPA 2009 Greenhouse Gas Inventory.] We believe investigating methods for estimating these emissions and including them in the reporting system in the future should be examined in depth. Indeed, EPA itself is currently leading a study to measure air pollution emissions of hydrogen sulfide, particulate matter, ammonia, nitrous oxide, volatile organic compounds, and other gases from concentrated animal feeding operations, including dairy cattle, and it should include an assessment of methane emissions in that study. [footnote: 317 See EPA, Air Emissions Monitoring Study, http://www.epa.gov/oecaagct/airmonitoringstudy.html; see also 70 Fed. Reg. 4,958, 4,959 (Jan. 31, 2005).] At present, although options for directly measuring emissions of methane from cows and other ruminant animals are not yet well proven, methods exist for calculating emissions factors—for example, those put forth by the Intergovernmental Panel on Climate Change ('IPCC') in its guidelines for national GHG accounting—to estimate emissions per operation, assuming data is available on the relevant animal populations and characteristics, such as average daily feed intake, as well as feed characteristics and methane conversion rates. [footnote: 318 Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories can be found at: http://www.ipcc-nggip.iges.or.jp/public/gl/invs1.html]

Response: See the response to comment EPA-HQ-OAR-2008-0508-0525.1, excerpt 25.

Commenter Name: Meredith Niles

Commenter Affiliation: Center for Food Safety (CFS)

Document Control Number: EPA-HQ-OAR-2008-0508-0457.1

Comment Excerpt Number: 3

Comment: In the proposed mandatory GHG reporting rule, the EPA fails to consider the reporting of emissions from enteric fermentation in the United States. CFS and ICTA believe that such an omission is a significant shortfall of the proposed rule, and recommends that the

EPA introduce mandatory reporting methods for measuring enteric fermentation emissions in the final rule. Enteric fermentation is a biological process involving microbial fermentation that occurs during the digestive processes of animals, especially ruminant animals such as cattle, sheep, and goats. A byproduct of this process is CH₄ which is either exhaled or eructated. The large rumen and fore-stomach indicative of ruminant animals contributes greatly to enteric fermentation emissions, and thus ruminant animals are the major contributors of methane. In the United States, 95% of all CH₄ emissions from enteric fermentation are from beef and dairy cattle. Enteric fermentation emissions increased by 4.3% between 1990 and 2007, and between 2005 and 2007, beef and dairy enteric fermentation emissions continued to climb. Enteric fermentation is now the single largest source of CH₄ emissions in the United States. As a result, CFS and ICTA believe it is an important contribution to climate change and should be considered a notable area for emissions reporting and reductions. Such reductions will only be possible when accurate reporting of emissions is achieved through the mandatory reporting rule. There is ample research available which has measured CH₄ emissions from various types of cattle operations and animals that will enable the EPA to develop its reporting standard. [Footnote: See DCN:EPA-HQ-OAR-2008-05-08-0457.1 for suggested readings.] Accurate reporting would help to enable appropriate reductions in CH₄ emissions from enteric fermentation. While reducing the number of ruminant animals in the United States would have a direct effect on reducing CH₄ emissions associated with enteric fermentation, there are also a number of other methods available to reduce enteric fermentation emissions. In general, dairy cattle produce the largest amount of methane emissions followed by beef cattle. Other animals such as sheep, goats, horses and swine produce significantly lower amounts of methane. Factors influencing CH₄ emissions include, "dietary factors such as type of carbohydrate in the diet, level of feed intake, level of production, digestive passage rate, presence of ionophores, degree of saturation of lipids in the diet, environmental factors such as temperature and genetic factors such as efficiency of feed conversion." [Footnote: Kebreab, E., Clark, K., Wagner-Riddle, C., & France, J. (2006) Methane and nitrous oxide emissions from Canadian Animal Agriculture: A review. Canadian Journal of Animal Science. 86: 135-157.] Research suggests that diet can play the most significant role in reducing CH₄ emissions from enteric fermentation. Scientific studies demonstrate that the addition of fats in the diet from natural sources including sunflowers, alfalfa, and coconut can reduce emissions. In general, studies have found that such additions can reduce CH₄ emissions by about 20%. Additional research demonstrates that cattle fed feedlot diets, often rich in corn and soy rather than forage, have higher rates of emissions. One study found that, CH₄ production was 20% higher in beef steers from a feedlot where they were fed low forage to grain diet compared to steers on a high forage to grain diet. Recent reports suggest that farmers are beginning to recognize the benefit of changing cattle diets to reduce CH₄ emissions, and that the food industry is encouraging the grazing of cattle on natural forages to do so. {See DCN:EPA-HQ-OAR-2008-05-08-0457.1 for references} Further research suggests that grazing management can play a similar role in reducing CH₄ emissions from enteric fermentation. Grazing on high-quality forage, made possible through maintenance of soil fertility through proper grazing management, reduced CH₄ emissions up to 22% in beef cattle in one study. "The reduction in CH₄ emission was related to better digestibility of high quality forage, which resulted in better efficiency of utilization, as was observed in higher average daily gain." {Footnote: Kebreab, et al (2006), pp. 143.]. In short, feeding cattle their natural diets of grass and forage was effective at reducing CH₄ emissions that are elevated on an intensive feedlot diet. Accurate reporting of enteric fermentation emissions, coupled with information regarding the feed and management system associated with various animal production systems will help to identify ways to reduce enteric fermentation emissions. CFS and ICTA encourage the EPA to consider this information in the context of their decision and to recognize that reductions in CH₄

emissions associated with enteric fermentation—the largest source of CH₄ emissions in the United States—can only be achieved through considerable reporting.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0525.1, excerpt 25.

Commenter Name: Ronald H. Strube

Commenter Affiliation: Veolia ES Solid Waste

Document Control Number: EPA-HQ-OAR-2008-0508-0690.1

Comment Excerpt Number: 1

Comment: The proposed GHG Mandatory Reporting Rule (the Rule) applies to facilities generating 25,000 tons per year of GHGs in carbon dioxide (CO₂) equivalents (CO₂e). Veolia strongly believes that EPA should only require the reporting of anthropogenic emissions and not require the reporting of any biogenic emissions. Anthropogenic sources emit climate forcing greenhouse gases. Biogenic sources are part of the natural near-term carbon cycle and not considered by international protocols as a climate forcing form of a greenhouse gas nor can they be attributed to a single facility. International greenhouse gas inventory reporting, such as that established by the Intergovernmental Panel on Climate Change (IPCC) and EPA's yearly estimates of greenhouse gas sinks and emissions, focus on anthropogenic, not biogenic, emissions.

Response: EPA received several comments on the treatment of the biogenic emissions associated with biomass combustion under this rule. Some stated, as in this comment, that EPA should focus only on anthropogenic emissions and not require the reporting of any biogenic sources. Some reporters urged us to require the accounting of the emissions associated with the combustion of biomass in determining whether facilities exceeded the reporting threshold because of the potential for increased net GHG emissions into the atmosphere when evaluating the project on a life cycle basis. Finally, several commenters supported our proposed approach of not counting emissions associated with biomass combustion toward the threshold but requiring the separate reporting of these emissions by facilities that are required to report under the rule.

Upon review of the comments, we determined to retain the proposed approach in the final rule. Facilities are not required to count emissions associated with biomass combustion when determining whether they meet or exceed the threshold for reporting, but if the threshold is exceeded they are required to separately report emissions associated with the biomass combustion at the facility. This approach is consistent with IPCC Guidelines for National Greenhouse Gas Inventories, which require the separate reporting of CO₂ emissions from biomass combustion and also the approach taken in the U.S. Inventory of Greenhouse Gas Emissions and Sinks. Separate reporting of emissions from biomass combustion is also consistent with some State and regional GHG programs, such as California's mandatory GHG reporting program, the Western Climate Initiative, and The Climate Registry, all of which require reporting of biogenic emissions from stationary fuel combustion sources. The final rule does not eliminate the requirement to report emissions from the combustion of biomass fuels because they can be used as alternatives to fossil fuels. While this reporting requirement does not imply whether emissions from combustion of biomass will or will not be regulated in the future, the data collected will improve EPA's understanding of the extent of biomass combustion

and the sectors of the economy where biomass fuels are used. It will also allow EPA to improve methods for quantifying emissions through testing of biomass fuels.

We disagree with those commenters who argued that the "anthropogenic" emissions do not include emissions from biogenic source categories. In the lexicon of greenhouse gas emissions accounting, the opposite of "anthropogenic" is "natural", and the word "biogenic" is not synonomous with the word "natural". While "natural" sources of emissions are traditionally excluded from GHG inventories, many biogenic emission are the direct result of human actions and practices. Examples include the cultivation of livestock and rice and land use changes such as deforestation.

We also disagree with commenters who encouraged us to require facilities to include emissions from biomass combustion when determining applicability with the rule. As we noted in the proposed rule, the CO₂ emissions that result from the burning of biomass are considered to be part of the Earth's natural carbon cycle. We agree with several commenters, however, that not all of this biomass combustion is "carbon-neutral" if lifecycle emissions are considered. Requiring facility-level reporting from all the source categories required to prepare a complete lifecycle analysis is beyond the scope of this rule because many of the relevant source categories for this type of analysis are not included in this rule. The response to comment EPA-HQ-OAR-2008-0508-0525.1, excerpt 25 in this volume provides our rationale the coverage of agriculture and forestry emissions sources in the final rule, and the preamble section on source categories to report provides the response to comments on the coverage of carbon sequestration in the final rule. Thus, while recognize that life cycle analyses can be useful for many purposes, such as determining a facility's or product's overall carbon footprint, we are not requiring this reporting at this time. This rule is only one of many Federal, State, and regional programs related to GHG emissions and climate change.

The approach in the final rule provides EPA with complete information on combustion emissions from the facilities that exceed the emissions threshold based on their fossil fuel emissions, and avoids requiring reporting from facilities that would exceed the threshold only if their emissions from biomass fuels are counted. Thus, facilities that rely primarily on biomass fuels will not be required to report under the rule. We do not agree with the commenters that have argued that requiring the separate reporting of emissions from biomass combustion in units that co-fire biomass fuels will create a disincentive for these types of projects. Our analysis shows that the cost savings by co-firing biomass fuels can far exceed the minimal burden associated with this reporting requirement.

Commenter Name: Chris Hobson

Commenter Affiliation: Southern Company

Document Control Number: EPA-HQ-OAR-2008-0508-1645.2

Comment Excerpt Number: 12

Comment: Southern Company does not agree with reporting emissions from biomass. Southern Company agrees with EPA's statement found on their website that "[a]lthough the burning of biomass also produces carbon dioxide, the primary greenhouse gas, it is considered to be part of the natural carbon cycle of the earth. The plants take up carbon dioxide from the air while they are growing and then return it to the air when they are burned, thereby causing no net increase." (http://www.epa.gov/cleanenergy/energy-and-you/affect/air-emissions.html). Because these

emissions do not cause a net increase in carbon dioxide in the atmosphere, Southern Company does not agree with reporting emissions from biomass.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0690.1, excerpt 1.

Commenter Name: J. Southerland **Commenter Affiliation:** None

Document Control Number: EPA-HQ-OAR-2008-0508-0165

Comment Excerpt Number: 19

Comment: Emissions from combustion of renewable fuels should be included in the reported emissions as they are contributing to the total atmospheric concentration just as the fossil fuels, even though they may theoretically be taken up and put back into plants, etc. By the same token, it is inappropriate for mines to report the same emissions as well as the facility that burns coal. The point of combustion or release is the appropriate place for reporting though the impact is global. The objective should be to have a one to one relationship between molecules of GHG released to the air and what the ambient concentrations of accumulated GHG are.

Response: Regarding reporting of emissions from combustion of biomass fuels, see the response to comment EPA-HQ-OAR-2008-0508-0690.1, excerpt 1. For the response on reporting by both upstream and downstream sources, see the preamble section containing responses on source categories to report. At this time EPA is not going final with the suppliers of coal subpart. As we consider next steps, we will be reviewing the public comments and other relevant information. Thus, we are not responding to comments on this subpart at this time.

Commenter Name: Jeff A. Myrom

Commenter Affiliation: MidAmerican Energy Holdings Company **Document Control Number:** EPA-HQ-OAR-2008-0508-0581.1

Comment Excerpt Number: 15

Comment: MidAmerican submits that biomass-based fuels should not be included in the proposed reporting requirements because such emissions can be considered part of the biogenic carbon cycle.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0690.1, excerpt 1.

Commenter Name: Bruce J. Parker

Commenter Affiliation: National Solid Wastes Management Association

Document Control Number: EPA-HQ-OAR-2008-0508-2126

Comment Excerpt Number: 2

Comment: We strongly believe that EPA should only require the reporting of anthropogenic emissions and not require the reporting of any biogenic emissions. Anthropogenic sources emit climate forcing greenhouse gases. Biogenic sources are part of the natural near-term carbon cycle and not considered by international protocols as a climate forcing form of a greenhouse gas nor can they be attributed to a single facility. International greenhouse gas inventory reporting, such

as that established by the Intergovernmental Panel on Climate Change (IPCC) and EPA's yearly estimates of greenhouse gas sinks and emissions, focus on anthropogenic, not biogenic, emissions. We raise this issue because, although EPA states on page 16454 that it only wants reporting of anthropogenic emissions, the proposed rule requires facilities to report biogenic CO₂ emissions from stationary combustion sources. While we appreciate the Agency's proposal to exclude reporting of biogenic emissions from landfill gas flares, we are puzzled that the Agency would require facilities to report biogenic CO₂ emissions from the combustion of landfill gas in the engines and turbines that produce a renewable energy. By doing so, the Agency will increase the cost of creating a renewable energy and appear to prefer flaring landfill gas instead of recovering it as an energy source.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0690.1, excerpt 1.

Commenter Name: John H. Skinner

Commenter Affiliation: Solid Waste Association of North America (SWANA)

Document Control Number: EPA-HQ-OAR-2008-0508-0659.1

Comment Excerpt Number: 9

Comment: We support the separate reporting of biogenic emissions, as long as these emissions are not included in the total CO_2 emissions data. Biogenic emissions from flares are not required to be reported according to the preamble; however SWANA recommends that this also be stated specifically in the rule itself.

Response: For the response on reporting of biogenic emissions, see the response to comment EPA-HQ-OAR-2008-0508-0690.1, excerpt 1. See the preamble sections and comment response document volumes for Subpart HH (Municipal Solid Waste Landfills) and Subpart C (General Stationary Fuel Combustion Sources) for the response regarding reporting for flares.

Commenter Name: Chris Hornback

Commenter Affiliation: National Association of Clean Water Agencies (NACWA)

Document Control Number: EPA-HQ-OAR-2008-0508-0566.1

Comment Excerpt Number: 2

Comment: In the proposed rule, EPA makes a distinction between biogenic and anthropogenic emissions, and NACWA agrees that only anthropogenic emissions should count towards the reporting threshold.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0690.1, excerpt 1 and Section II.E of the preamble.

Commenter Name: Stephen E. Woock

Commenter Affiliation: Weyerhaeuser Company

Document Control Number: EPA-HQ-OAR-2008-0508-0451.1

Comment: Weyerhaeuser agrees with and supports EPA's proposal to report biogenic CO₂ separately. This is consistent with the approach taken in the IPCC and national US GHG inventory frameworks, and correctly supports the concept that regulating biogenic CO₂ in the global warming context is unnecessary because biogenic CO₂ emissions are recycled to bound carbon in the photosynthetic process and thus do not contribute to new global GHG inventory.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0690.1, excerpt 1.

Commenter Name: Laurie Burt

Commenter Affiliation: Massachusetts Department of Environmental Protection

Document Control Number: EPA-HQ-OAR-2008-0508-0212b

Comment Excerpt Number: 5

Comment: We recommend that the national program include biomass facilities' retail sellers of electricity to report their greenhouse gases, and we have also included a provision for voluntary. Biomass does have the important potential to be a component of greenhouse gas mitigation, but the starting point is to quantify biomass emissions in order to ensure that they are properly accounted for and credited as appropriate. For example, in determining biomass facilities or fuels, if they have a net-zero impact on greenhouse gases and the atmosphere, it means known their life-cycle emissions and, therefore, keeping track of those emissions. That is what we have done and proposed in Massachusetts.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0690.1, excerpt 1.

Commenter Name: John Seltz

Commenter Affiliation: Minnesota Pollution Control Agency (MPCA)

Document Control Number: EPA-HQ-OAR-2008-0508-0465.1

Comment Excerpt Number: 5

Comment: Under the proposed rule, ethanol facilities that emit more than 25,000 CO₂-equivalent tons per year of greenhouses must report. The proposed rule does not reference biogenic CO₂ emissions from fermentation at the facilities. Biogenic CO₂ emissions from the combustion of biomass are reportable under the federal reporting rule. This seems inconsistent. The MPCA is interested in understanding the basis for EPA's reasoning on this issue.

Response: With respect to emissions from combustion of biomass fuels, see the response to comment EPA-HQ-OAR-2008-0508-0690.1, excerpt 1. At this time EPA is not going final with the ethanol production subpart. As we consider next steps, we will be reviewing the public comments and other relevant information. Thus, we are not responding to comments on this subpart at this time.

Commenter Name: Laurie Burt

Commenter Affiliation: Massachusetts Department of Environmental Protection

Document Control Number: EPA-HQ-OAR-2008-0508-0212b

Comment: but we also think that, more broadly -- and we have a number of facilities that are using both carbon-based or biomass -- that it is important to have the baseline of those emissions, so that as we come to understand the life-cycle aspects, that they can actually be appropriately netted out, basically, to see if there is a net-zero impact or how much of a net-zero impact there is, because there will be different kinds of biomass. Some may be more effective than others, and I think to let the marketplace do its job, you really need to see how effective they are. The starting point is actually measuring. So we do that in a very value-neutral way and then allow facilities to document what is happening. Whether or not sustainable forestry or other practices, it is important to be able to net those out for the actual emissions. So, as you are moving forward with program objectives, you do need to consider actual emissions to be able to conduct those calculations. It is the same way that you do having baseline than applying a REC or some other contract, existing contracts, for adjustments on those calculations.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0690.1, excerpt 1.

Commenter Name: Laurie Burt

Commenter Affiliation: Massachusetts Department of Environmental Protection

Document Control Number: EPA-HQ-OAR-2008-0508-0453.1

Comment Excerpt Number: 6

Comment: For biomass combustion to consistently achieve very low levels of CO₂ emissions on a net basis, forest ecosystems must be carefully managed and harvested in ways that sustain the store of terrestrial carbon over time. Similarly, agricultural production of biomass feed stocks must be carefully managed in order to maintain the carbon advantages of the biomass/biofuels. Otherwise, harvesting biomass runs the risk of depleting carbon storage, resulting in no additional climate benefits over the long-term. A reduction in the carbon storage capabilities of living biomass could happen locally on a small scale through inappropriate management practices or could happen through wholesale deforestation or forest conversion into biofuels plantations in other parts of the world.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0690.1, excerpt 1.

Commenter Name: Jeffrey T. Miller

Commenter Affiliation: Treated Wood Council (TWC)

Document Control Number: EPA-HQ-OAR-2008-0508-0665.1

Comment Excerpt Number: 2

Comment: It is important for EPA to clarify in the final rule that emissions from the combustion of biomass are not included for the actual reporting of GHG emissions.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0690.1, excerpt 1. Facilities are not required to count emissions associated with biomass combustion when determining whether they meet or exceed the threshold for reporting, but if the threshold is exceeded they are required to separately report emissions associated with the biomass combustion at the facility. Including reporting of biogenic CO₂ emissions at facilities that are already reporting for stationary combustion provides EPA with information on the use of biomass fuels as they relate to reductions of fossil CO₂ emissions over time. This reporting requirement also provides

additional data for verification. EPA believes that it is clear in $\S98.2$, however, that CO_2 emissions from biogenic fuels do not count toward the 25,000 metric ton threshold for reporting for stationary combustion units, although CH_4 and N_2O emissions from biomass fuels must be considered when calculating the threshold and determining applicability.

Commenter Name: Laurie Burt

Commenter Affiliation: Massachusetts Department of Environmental Protection

Document Control Number: EPA-HQ-OAR-2008-0508-0453.1

Comment Excerpt Number: 4

Comment: Massachusetts supports EPA's proposal to require separate reporting of biogenic emissions by facilities that are subject to the reporting rule. We agree that biomass and biofuels have the potential to be important components of greenhouse emission mitigation efforts, and believe that it is important to separately quantify their emissions in order to ensure that these emissions are properly accounted for and are credited as appropriate. Carbon dioxide, whether biogenic or not, is a greenhouse gas, and efforts to fully understand the lifecycle effects of all fuels, including the possibility that it may be appropriate to consider some biogenic emissions sources to be "carbon neutral," will be well served by collecting as much information about these emissions as possible. Separate reporting of biomass emissions is required by TCR and by Massachusetts. Massachusetts intends to explore the possibility that our registry will be used to document the source of biogenic material that is being combusted, and encourages EPA to consider adding similar functionality to the federal reporting program.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0690.1, excerpt 1.

Commenter Name: David A. Buff

Commenter Affiliation: Florida Sugar Industry (FSI)

Document Control Number: EPA-HQ-OAR-2008-0508-0500.1

Comment Excerpt Number: 2

Comment: All CO_2 equivalent (CO_2 e) emissions from biomass combustion should be excluded from the reporting requirement for all source categories because the combustion of biomass materials, such as bagasse, is inherently carbon-neutral. If biomass combustion is not excluded, then the sequestration of carbon due to the growing of the biomass or incorporation of the carbon into products and byproducts should be included in the reporting in order to obtain information on the real, direct, CO_2 e emissions from a facility.

Response: For the response on emissions from biomass combustion, see the response to comment EPA-HQ-OAR-2008-0508-0690.1, excerpt 1. For the response on coverage of carbon sequestration, see the preamble section on source categories to report. For response to the comment on other agricultural sources, see comment EPA-HQ-OAR-2008-0508-0525.1, excerpt 25.

Commenter Name: Bob Dinneen

Commenter Affiliation: Renewable Fuels Association (RFA) **Document Control Number:** EPA-HQ-OAR-2008-0508-0494.1

Comment Excerpt Number: 21

Comment: EPA has properly focused on non-biogenic anthropogenic sources of GHG emissions in the Proposed Rule. Ethanol is produced from biomass, and the carbon in biomass is of a biogenic origin --meaning that it was recently contained in living organic matter. For example, emissions associated with ethanol fermentation are not counted against GHG emissions in Iowa's reporting program because they are considered biogenic emissions. Also, EPA has found that "the CO₂ emitted from biomass-based fuels combustion does not increase atmospheric CO₂ concentrations, assuming the biogenic carbon emitted is offset by the uptake of CO₂ resulting from the growth of new biomass." 74 Fed. Reg. 24,904, 25,039 (May 26, 2009). This also applies to biogenic emissions from fermentation.

Response: With respect to emissions from combustion of biomass fuels, see the response to comment EPA-HQ-OAR-2008-0508-0690.1, excerpt 1. At this time EPA is not going final with the ethanol production subpart. As we consider next steps, we will be reviewing the public comments and other relevant information. Thus, we are not responding to comments on this subpart at this time.

Commenter Name: Carol E. Whitman

Commenter Affiliation: National Rural Electric Cooperative Association (NRECA)

Document Control Number: EPA-HQ-OAR-2008-0508-0483.1

Comment Excerpt Number: 6

Comment: We do not support the requirement in §98.33(e) to report biogenic GHG emissions from biomass generation. Historically, biomass has been considered "carbon neutral." Forest and agricultural residues used to fuel power plants have been considered "carbon neutral" because, roughly speaking, they do not emit any additional CO₂ beyond what would have been emitted if the residues had been left to decay naturally. Similarly, when forest and agricultural products are used for combustion and replanted, the biomass has been considered "carbon neutral" because the cycle of growing trees or crops, generating power, and growing more trees or crops is essentially just recycling the same CO₂ that is already in the atmosphere. In the Climate Leaders program, EPA already recognizes the carbon neutrality of biomass in stating, it is assumed that combustion of biofuels do not contribute to net addition of CO₂ to the atmosphere. (Climate Leaders Greenhouse Gas Inventory Protocol Core Module Guidance: Direct Emissions from Stationary Com- bustion Sources, page 2.) If the biogenic emissions are required to be reported without recognition of their carbon neutrality, it could discourage future use of biomass for electricity generation. As a result, we urge EPA to eliminate the requirement to report biogenic emissions from stationary combustion units. However, if this requirement does become a part of the final regulations, we would strongly urge EPA to explicitly characterize the biogenic GHG emissions as "carbon neutral" and to exclude them from any totaling with non-biogenic GHG emissions data. This would be consistent with the treatment in the Climate Leaders guidance documents, where the biomass emissions are reported but not used in an entity's total inventory of CO₂e. It would also be consistent with the provision in §98.2(b)(2) whereby biogenic emissions are excluded in determining if a facility exceeds the threshold for reporting.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0690.1, excerpt 1 and volume of this document titled "Subpart C: General Stationary Fuel Combustion Sources". In the final rule, EPA has not explicitly characterized biogenic GHG emissions as "carbon neutral" because this is a complex and site-specific determination that is beyond the scope of this rule. We intend to keep the emissions associated with the combustion of biomass-based fuels separate from the emissions associated with fossil fuels.

Commenter Name: Kerry Kelly

Commenter Affiliation: Waste Management (WM)

Document Control Number: EPA-HQ-OAR-2008-0508-0376.1

Comment Excerpt Number: 18

Comment: Waste Management urges EPA not to require reporting of biogenic GHG emissions in the Mandatory Reporting Rule. To do so would be inconsistent with international inventory practices embodied in the Intergovernmental Panel on Climate Change's guidelines (2006 IPCC Guidelines for National GHG Inventories, Volume 1, General Guidance and Reporting, Section 1.2 Estimation Methods), and would also be inconsistent with the stated scope and purpose of the MRR described in the preamble. EPA states "Consistent with existing international, national, regional, and corporate-level GHG reporting programs, this proposal includes only anthropogenic sources." 74 Fed. Reg. 16465. However, the proposed rule then requires stationary combustion sources to report biogenic carbon dioxide emissions. In addition to being inconsistent with international practices, this requirement also will add significant complexity and labor to an already complex and difficult task for no legitimate benefit. In fact, inclusion of biogenic GHG emissions in an inventory is, at worst, misleading, and, at best a distraction, to the quantification of controllable, anthropogenic GHG emissions. While we acknowledge that comprehensive GHG emission information that includes biogenic and anthropogenic fuel sources is useful, even essential to, conducting a quality assurance review of GHG emission calculations for combustion sources, the extensive data disclosure requirements in the proposed rule will provide the necessary data absent including biogenic emissions data in the report itself. The complexity and potential for generating misleading information is very evident where the reporting facility is an MSW landfill. While we appreciate the direction in the rule not to report biogenic emissions from flaring landfill gas, we are disturbed that the MRR directs us to report biogenic carbon dioxide (CO₂) from the combustion of landfill gas in hundreds of engines and turbines that produce renewable energy. This not only imposes an additional emissions estimation and reporting burden on the practice of beneficial use of landfill gas, it also creates the impression, whether or not intended, that EPA considers GHG emissions from beneficial reuse of landfill gas to be of greater concern than those from flaring. This additional burden imposed on beneficial users of landfill gas seems counterproductive in light of the many federal and state policies aimed at promoting renewable energy production and EPA's significant investment of public resources in operating its Landfill Methane Outreach and Methane to Markets programs. Requiring that biogenic CO₂ emissions from beneficial use of landfill gas be estimated and reported, with all the accompanying enforcement liability of the MRR program, will act as a substantial project deterrent, and may predispose landfill owner/operators to flare the gas rather than investing in a renewable energy project. The beneficial use of landfill gas for energy production provides a significant opportunity for effective use of alternative energy, while managing landfill gas in an environmentally protective manner. Electricity generation from recovered methane originating from landfills already provides a significant source of renewable energy; yet there exist many opportunities to increase the number of projects that convert

decomposed municipal waste into energy. The EPA's rulemaking should maximize the incentives for landfill owners to pursue beneficial use projects that convert collected landfill gas into usable energy.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0690.1, excerpt 1.

Commenter Name: Stuart A. Clark

Commenter Affiliation: Washington State Department of Ecology (Ecology)

Document Control Number: EPA-HQ-OAR-2008-0508-0646.1

Comment Excerpt Number: 4

Comment: Emissions from combustion of biomass should be included in determining whether a source meets the reporting threshold if not carbon neutral: Ecology disagrees with EPA's broad exclusion of GHG emissions from biomass combustion in assessing whether a source has met the reporting threshold. Our concern is that not all biomass emissions are carbon neutral, and some can be carbon intensive, so this exclusion is overbroad. We are concerned that many sources of GHG emissions could escape reporting requirements through this mechanism. Ecology instead recommends an approach in line with that being developed by WCI. In this approach, CO₂ emissions from biomass up to 15,000 MT CO₂e can be excluded from reporting provided the total GHG emissions from biomass are less than 25,000 MT CO₂e. This exemption is limited to solid biomass fuels. Further, WCI provides the ability to exempt CO₂ emissions from biomass fuels from the reporting threshold once they have been determined to be carbon neutral. We believe this approach appropriately limits exclusion of CO₂ emissions from biomass from the reporting threshold without allowing exclusions for significant, potentially carbon-intensive biofuel combustion.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0690.1, excerpt 1. In the final rule, EPA has not explicitly characterized biogenic GHG emissions as "carbon neutral" because this is a complex and site-specific determination that is beyond the scope of this rule. We intend to keep the emissions associated with the combustion of biomass-based fuels separate from the emissions associated with fossil fuels.

Commenter Name: Keith Overcash

Commenter Affiliation: North Carolina Division of Air Quality (NCDAQ)

Document Control Number: EPA-HQ-OAR-2008-0508-0588

Comment Excerpt Number: 8

Comment: NC DAQ does not agree with the exclusion of CO₂ emissions from biomass (e.g., in subparts C and AA) as part of the determination of the threshold level. EPA indicates that "This is similar to the approach taken by the IPCC and various other GHG emission inventories." However, this is the approach taken by TCR or NC's proposed rule. It is also not consistent internally, as sources that exceed the reporting threshold still need to report biogenic emissions. This would give an incomplete and unclear picture of biogenic emissions. We feel it is important to determine the amount of emissions from biomass from facilities. In addition, this exemption would potentially impact dozens of sources in North Carolina that would not meet the 25,000 metric ton reporting threshold if biogenic CO₂ from biomass combustion were included.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0690.1, excerpt 1.

Commenter Name: Steven M. Pirner

Commenter Affiliation: South Dakota Department of Environment and Natural Resources (SD

DENR)

Document Control Number: EPA-HQ-OAR-2008-0508-0576

Comment Excerpt Number: 3

Comment: EPA is not proposing to require reporting by suppliers of biomass-based fuels, or renewable fuels, due to the fact that greenhouse gases emitted upon combustion of these fuels are traditionally taken into account at the point of biomass production. EPA is seeking comment on this approach and notes that producers of some biomass-based fuels (e.g., ethanol) would be subject to reporting requirements for their on-site emissions. SD DENR agrees with this approach because it avoids double counting of greenhouse gas emissions and meets the objective of the rule to collect comprehensive and accurate data which will be used to develop future policies and climate change legislation.

Response: EPA thanks the commenter for their input. The final rule, like the proposed rule does not require suppliers to report the biomass fuels they supply. Regarding reporting of direct emissions from combustion of biomass fuels, see the response to comment EPA-HQ-OAR-2008-0508-0690.1, excerpt 1. At this time EPA is not going final with the ethanol production subpart. As we consider next steps, we will be reviewing the public comments and other relevant information. Thus, we are not responding to comments on this subpart at this time.

Commenter Name: Rhea Hale

Commenter Affiliation: American Forest & Paper Association (AF&PA)

Document Control Number: EPA-HQ-OAR-2008-0508-0909.1

Comment Excerpt Number: 38

Comment: AF&PA agrees with EPA's proposal not to require reporting by upstream suppliers of biomass-based fuels, or renewable fuels. The majority of biomass in the U.S. is supplied by thousands of small private landowners who not only do not have the resources to comply with such reporting requirements, but quite often do not know whether the biomass supplied will be used for fuel or other end uses such as saw timber or mulch.

Response: EPA thanks the commenter for their input. The final rule, like the proposed rule, does not require reporting of GHG emissions from agricultural and other land uses such as growing biomass crops.

Commenter Name: See Table 11

Commenter Affiliation:

Document Control Number: EPA-HQ-OAR-2008-0508-0635

Comment Excerpt Number: 42

Comment: The production and consumption of biomass fuels can result in net GHG emissions that, while often lower than their fossil fuel substitutes, can be significant. Biomass is an

especially significant source of energy for some sectors, such as pulp and paper where it is estimated to comprise nearly 2/3 of total fuel use. The development of new biofuel technologies and economic incentives from climate policies may lead to significant increases in the use of biofuels over coming decades. Because of the potential for increased net GHG emissions (and since combustion of biomass-based fuels emit carbon dioxide into the atmosphere just as fossil fuels do), it is essential to collect information on the use of biomass, including liquid, solid and gaseous fuels. We support the recommendation in the proposed regulation to require reporting of emissions from combustion of biomass fuels. Estimation of full lifecycle emissions of biomass fuels will eventually be necessary to determine the net GHG impact, but required reporting of fuel volumes and production characteristics is an important and well-justified initial step. We disagree, however, with the proposal to exclude emissions from biomass fuels in the calculation of whether a facility's emissions exceed the reporting threshold. Net GHG emissions from biomass fuels may exceed those of displaced fossil fuels and should not be presumed to be negligible for the threshold determination. The draft regulation should be revised to require the consumption of biomass fuels to count towards the threshold determination.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0690.1, excerpt 1.

Commenter Name: See Table 1

Commenter Affiliation:

Document Control Number: EPA-HQ-OAR-2008-0508-0358

Comment Excerpt Number: 5

Comment: I applaud the EPA's decision to track global warming pollution through its entire lifecycle by requiring upstream and downstream reporting.

Response: EPA thanks the commenter for their input. For the response reporting of upstream and downstream emissions, see the response to EPA-HQ-OAR-2008-0508-0979.1, excerpt 3.

Commenter Name: Sonal Mahida

Commenter Affiliation: Carbon Disclosure Project

Document Control Number: EPA-HQ-OAR-2008-0508-0306.1

Comment Excerpt Number: 10

Comment: CDP fully supports EPA's arguments for requiring reporting of emissions created through the use of certain products such as fuels and automobiles, and agrees that this will provide valuable information to EPA and stakeholders in the development of climate change policy and programs. EPA is no doubt aware that the different types of emissions data can be easily differentiated using a framework such as the three scopes defined in the "GHG Protocol - A Corporate Reporting and Accounting Standard" published by the WRI/World Business Council for Sustainable Development. Under this methodology the upstream reporting requirements suggested by EPA would fall under Scope 3 (in the product use category), while direct emissions from owned or controlled facilities would fall under Scope 1. In 2009, CDP extended its Information Request to include questions aimed at the automobile and auto component manufacturing industries. This was based on a disclosure framework produced by three investor groups - the Institutional Investors Group on Climate Change (IIGCC), Ceres, and the Australia/New Zealand Investor Group on Climate Change (IGCC). The CDP Questionnaire

Automotive Supplement 2009 (attached) includes a request for sales-weighted carbon dioxide emissions expressed in g CO₂ per mile for different vehicle categories. CDP would be pleased to share the responses to this first request for information in this area as they may provide information that is useful to EPA in finalizing its rule. CDP suggests that EPA considers other products where emissions reporting for the product use phase may be warranted. Existing corporate responses in our database show that where companies do report product use emissions. it is not uncommon for emissions from the product use phase to be the same order of magnitude or an order of magnitude greater than either direct emissions (Scope 1, according to the GHG Protocol) or indirect emissions associated with purchased electricity, heat, steam and cooling (Scope 2), particularly when product use resulted in the emission of greenhouse gases other than CO₂. For example, two pharmaceutical companies reported to CDP that product use emissions from medical inhalers were in the first case of an equal order of magnitude to both scope 1 and scope 2 emissions, and in the second case an order of magnitude greater than the scope 1 total and same order of magnitude as the scope 2 total. These figures are illustrative of the significance of the product use phase for some business sectors. CDP acknowledges that the rule includes reporting requirements for industrial GHG suppliers, and that EPA may understandably draw back from requesting Scope 3 reporting across the board. However for some sectors reporting on the estimated emissions from product use may provide useful data that could lead to additional measures to drive emissions downwards. By making this suggestion we are not advocating any particular policy response, but are suggesting that EPA might be able to identify large aggregate sources of greenhouse emissions which are currently uncontrolled and would not be identified under the current draft of the reporting rule.

Response: EPA considered the inclusion of emissions from product use categories in this rule, and determined that the rule includes those categories of greatest importance. To avoid requiring reporting from thousands of small facilities and mobile source owners, the rule requires reporting by fuel and industrial GHG suppliers and mobile source manufacturers. Because the calculation of GHG emissions from these source categories assumes that all fuels are fully combusted and that all industrial GHGs are fully emitted during their use, reporting these supply data will provide an accurate estimate of national emissions from products while substantially reducing the number of reporters. Reporting by these upstream sources in conjunction with the downstream reporting requirements will cover approximately 85 percent of U.S. GHG emissions.

Commenter Name: Robert P. Martin

Commenter Affiliation: Pew Environment Group, The Pew Charitable Trusts

Document Control Number: EPA-HQ-OAR-2008-0508-0271

Comment Excerpt Number: 1

Comment: The Pew Commission on Industrial Farm Animal Production was a two year project to recommend solutions to the public health, environmental, animal welfare, and rural community problems caused by industrial farm animal production (IFAP) facilities. The Commission released its final report, Putting Meat on the Table: Industrial Food Animal Production in America, on April 29, 2008. In general, the Commission believed that industrial farm animal operations should be regulated as any other industrial facility, including application of the Clean Air and Clean Water Acts that pertain to industrial farms. Therefore, the proposed rule to require the largest livestock operations to report greenhouse gas emissions from waste lagoons is a step in the right direction. Specifically on the issue of greenhouse gas emissions, the Commission stated: "Globally, greenhouse gas emissions from all livestock operations account

for 18% of anthropogenic greenhouse gas emissions, exceeding those from the transportation sector (Steinfeld et al., 2006). Agriculture accounts for 7.4% of the total U.S. release of greenhouse gases (EPA, 2007a). Animals produce greenhouse gases such as methane and carbon dioxide during the digestion process. Other greenhouse gases, primarily nitrous oxide, arise mainly from the microbial degradation of manure. Additional emissions result from degradation processes in uncovered waste lagoons and anaerobic digesters. The global warming potential of these emissions, compared to a value of one for carbon dioxide, is 62 for methane and 275 for nitrous oxide on a 20-year time horizon."

Response: EPA thanks the commenter for their input. See the preamble section and comment response document volume on Subpart JJ, Manure Management, for responses to specific comments on this source category.

Commenter Name: Justin Oldfield

Commenter Affiliation: California Cattlemen's Association **Document Control Number:** EPA-HQ-OAR-2008-0508-0228b

Comment Excerpt Number: 7

Comment: Livestock grazing is also a management tool to decrease fuel loads and intensity of wildfires, which is one of the largest sources of greenhouse gas emissions. California feed lots provide efficient systems to finish cattle, maximizing energy production and minimizing methane output. If feed lots did not exist to finish cattle, it is estimated that roughly 84,000,000 acres would be needed to produce the same levels of nutritious beef that we produce today.

Response: EPA thanks the commenter for their input. See the preamble section and comment response document volume on Subpart JJ, Manure Management, for responses to specific comments on this source category.

Commenter Name: Justin Oldfield

Commenter Affiliation: California Cattlemen's Association **Document Control Number:** EPA-HQ-OAR-2008-0508-0228b

Comment Excerpt Number: 6

Comment: California's total cattle production chain provides numerous environmental and carbon sequestration benefits. California ranchers manage or own nearly 34,000,000 acres of California range land that provide numerous carbon sequestration benefits, whether it be through soil carbon sequestration or sequestration due to management of forested riparian areas. This land is also the home to numerous endangered species, streams, rivers and serves as a leading economic base in rural areas.

Response: EPA thanks the commenter for the information, which we will consider as we evaluate CAA options to address GHG emissions and climate change. However, in this rule, EPA is focusing on collection of data on direct GHG emissions from facilities above thresholds and on quantities supplied by upstream suppliers of fuels and industrial GHGs. Therefore, the rule does not allow for netting of emissions or the consideration of offsets in determining applicability to an emissions threshold.

Commenter Name: Justin Oldfield

Commenter Affiliation: California Cattlemen's Association **Document Control Number:** EPA-HQ-OAR-2008-0508-0228b

Comment Excerpt Number: 8

Comment: It should also be noted that a majority of the emissions originated from livestock operations are natural and are an integral part of the biogenic process. These emissions are not anthropogenic and cannot be reduced to emissions originating from other human derived sources.

Response: While we do not necessarily agree with the commenter's statements about enteric and other emissions, at this time EPA is only requiring reporting from manure management systems. We are not exempting or otherwise commenting on other agricultural emissions at this time. However, we will be considering comments on this subject as we continue to assess possible future Climate Change policies. See also the responses to comments EPA-HQ-OAR-2008-0508-0525.1, excerpt 25, EPA-HQ-OAR-2008-0383, excerpt 7, EPA-HQ-OAR-2008-690.1, excerpt 1.

Commenter Name: Dale E. Furrow

Commenter Affiliation: The George Washington University School of Public Health MPH

Candidate

Document Control Number: EPA-HQ-OAR-2008-0508-0219.1

Comment Excerpt Number: 2

Comment: According to the proposed rule, lower threshold alternatives (<25,000 metric tons) were considered, including 1,000 and 10,000 metric tons of carbon equivalent per year. Both were believed to broaden national emissions coverage, but to do so by "disproportionately increasing the number of affected facilities." However, no justification was presented regarding rejection of a 5,000 metric ton reporting limit. If the 1000 ton limit was rejected because the gains would not outweigh the costs, and the 10,000 ton limit was rejected because it would only improve national emissions data coverage by approximately 1 percent as reported, then perhaps a mid-level reporting limit would both broaden the coverage and proportionately increase the number of impacted facilities with a justifiable statistical advantage. According to a report issued by Goodwin and Procter released in March 2009, several US states (California, Connecticut, Massachusetts, New Jersey, Wisconsin, and Washington) have recently issued or proposed GHG reporting regulations. The regulations issued by the State of Massachusetts included a reporting limit of 5,000 tons per year. EPA should coordinate with the State of Massachusetts to consider the reason for selection of the 5,000 ton threshold and consider revising the 25,000 ton limit.

Response: See the preamble for the response on selection of the threshold. Also, as explained in the preamble, this reporting rule does not preempt or replace State rules or programs.

Commenter Name: Anton Chiono

Commenter Affiliation: Pacific Forest Trust

Document Control Number: EPA-HQ-OAR-2008-0508-0228i

Comment: Accurate monitoring, reporting and accounting of emissions and sink is paramount to addressing the problem of global climate change. I do note that inclusive in that is accounting and monitoring sinks. So we would like to recommend that to strengthen the proposed rule forests are always included in mandatory reporting requirements. Forests are really the greatest assets to our fight against global climate change. They sequester more than 880,000,000 metric tons of carbon dioxide annually, and can sequester far, far more, 40- to 60 billion metric tons of carbon in the next half century. But this is contingent upon the conservation and preservation of the climate benefits of forests. A recent New York Times op ed lamented that simply reducing carbon dioxide emissions isn't enough now. We have gone too far. We need some sort of technology to start removing carbon dioxide from the atmosphere. That technology is forests. However, this is contingent upon keeping forests in full capacity of removing carbon dioxide, sequestering carbon dioxide and storing carbon dioxide. This is in jeopardy. Currently 1.5 million acres of forest lands are lost annually, and it is projected that in the next 50 years 50,000,000 or more acres of forest lands will be lost from private land alone. And this is a major challenge that is facing the world of forests and the continued sequestration of fighting the climate change. We feel a way to address this is to require reporting from forest lands on their emissions and sinks from forest lands. Now in your justification for the exclusion of forests from reporting requirements you cite redundancies that would occur since forests are already included in EPA's inventory on greenhouse gas emissions and sinks. However, the data on forests in that inventory are based on the forest inventory and analysis study which quantifies forests at a large scale. And EPA actually notes in their justification for the exclusion of forests that these data really aren't meant to be used as a fine scale; and what is sufficient for tracking emissions at a national scale, there aren't enough data points on private lands to allow us to a physical robustness to track forest in fine scale or a landowner scale or even a state scale. Another justification that EPA cites in their rationale for excluding forests from the mandatory reporting requirement is that reporting would be too onerous since there are so many forest landowners across the country. This is true; there are lots of forest landowners across the country. However, for the largest forest parcels, those a thousand acres and above out of all the forest landowners, these landowners are only three-tenths of a percent. You have very few, relatively few, forest landowners who own the larger parcels that are emitting or sequestering most carbon dioxide. So really requiring reporting from these landowners wouldn't include a whole great number. It wouldn't require all the forest landowners. And data on carbon dioxides would exist currently and that is in stock requirements. These large forest landowners are managing the forest generally for timber production, and for timber production data needed on stocking of the forest. Now these landowners have that data. They are using these data in their analyses, and they are also required to report that via harvest plans or severance taxes or harvest taxes. These data are being collected by forest landowners. What we at Pacific Forest Trust would like to see is the inclusion of these forest landowners and their reporting of these data. This wouldn't necessarily require any additional data collection, but simply submitting their stocking volumes to the EPA so that forest carbon dioxide emissions could be tracked at this finer landowner entity scale.

Response: For the response on forest sequestration, see the preamble section containing responses on source categories to report and the response to comment EPA-HQ-OAR-2008-0508-0525.1, excerpt 25.

61

Commenter Name: J. Southerland **Commenter Affiliation:** None

Document Control Number: EPA-HQ-OAR-2008-0508-0165

Comment Excerpt Number: 18

Comment: The reporting should include opportunity for including sequestration, sinks and other means of reduction in the database.

Response: For the response on sequestration and sinks, see the preamble section containing responses on source categories to report.

Commenter Name: Anonymous **Commenter Affiliation:** None

Document Control Number: EPA-HQ-OAR-2008-0508-0267.1

Comment Excerpt Number: 1

Comment: EPA needs to add the following information for each source: (1) Average tons of CO_2 emitted daily; (2) Acres of CO_2 sinks within 1.5 mile radius (4525 acres); (3) Immediate natural daily capture of CO_2 in these sinks because of the earth's magnetic and gravity fields (as measured between rain storms).

Response: For the response on sinks, see the preamble section containing responses on source categories to report. Facilities that are subject to the rule are required to report annual CO_2e emissions. Depending on the source category, this can include combustion CO_2 emissions, process CO_2 emissions, and/or emissions of other GHGs. Each source category subpart lists the specific GHGs and emission sources that are relevant to that source category and must be reported. Average daily CO_2 emissions are generally not needed for the intended purpose of this rule, given that the impacts of climate change are long-term rather that acute, and data on annual emissions are most useful in developing future GHG policies and programs.

Commenter Name: Lyle Nelson

Commenter Affiliation: WEST Associates

Document Control Number: EPA-HQ-OAR-2008-0508-02280

Comment Excerpt Number: 1

Comment: As we understand, the rule will appropriately exempt utilities from reporting indirect greenhouse gas emissions.

Response: EPA thanks the commenter for their input. EPA has determined that a focus on direct GHG emissions from facilities above the thresholds and data on quantities of fuels and GHGs supplied by upstream fuel and industrial gas suppliers is consistent with the Appropriations Act and covers approximately 85 percent of U.S. GHG emissions. Since the goal of today's rule is to collect data on emissions from downstream direct emitters and upstream production, the collection of indirect emissions is not included at this time. While EPA is not collecting data on indirect emissions in this rule, we understand that acquiring such data may be important in the future. Therefore, we are exploring options for possible future data collection on electricity purchases and other indirect emissions, and the uses of such data.

Commenter Name: Philip Marston

Commenter Affiliation: Denbury Resources

Document Control Number: EPA-HQ-OAR-2008-0508-0212.1i

Comment Excerpt Number: 1

Comment: Denbury has begun signing contracts to purchase anthropogenic CO_2 to be captured from industrial facilities to be built. These are not the large coal-fired powerplants that everybody is talking about. These are facilities such as ammonia plants, coal-to-liquids plans, facilities of that nature, where the cost of capture is less, but what that means for this rulemaking is we want to make sure that there is a synchronization between the reporting protocols in the other source categories because those source categories are going to be interfacing in the future with the CO_2 pipeline category, which is part of the CO_2 supplier category. So I don't have any specific comments there but will be looking at that to see how the anthropogenic CO_2 is integrated into the existing infrastructure.

Response: EPA thanks the commenter for their input. Subpart PP, Suppliers of CO_2 , applies to manufacturing facilities that capture CO_2 and supply it to other entities for commercial applications. See the preamble and comment response document on subpart PP for responses to specific comments.

Commenter Name: George Gosieski

Commenter Affiliation: Business EcoSystems

Document Control Number: EPA-HQ-OAR-2008-0508-0212p

Comment Excerpt Number: 1

Comment: A particular concern is the Preamble's recognition of the rule's influence on policy and program decisions. Unfortunately, in its current state, this rule would not provide sufficient data for informed decision-making. Supporting informed decision-making would require the inclusion of major consumers; hence, the following recommendations. One, include the commercial real estate sector, commercial buildings, in the reporting population. Two, create a minimum reporting threshold of 25,000 metric tons of CO₂ per year based on the collective output of owned portfolios versus individual buildings. Third, do not include leased facilities in an effort to minimize double counting, administrative overhead, and avoid rule complexity. Four, collect consumption and CO₂ data leveraging existing online data collection mechanisms such as EPA Energy Star's Portfolio Manager. Finally, at a minimum, collect consumption data using those existing tools. Including this sector in the reporting population is critical to producing informed policies and programs. For example, as noted in the draft, the utility provider's footprint is not solely based on its energy portfolio. It is a combination of the portfolio and consumer demand; in this case, the commercial real estate sector. Why include this particular sector? Data produced by the U.S. Green Building Council and EIA's 2007 Commercial Building Energy Consumption Survey illustrate this sector's sizeable demand profile and, hence, its contribution to national capacity and environmental issues. What this data fails to recognize are the highly inefficient sector practices. For example, multiple studies find that 50 to 70 percent of assigned office space is vacant based on utilization strategies and the inability to align with today's working practices. In effect, we are supplying buildings as if they are operating in full capacity, when, in fact, they are functioning at 30 to 50 percent capacity. Hence, incorporating

the commercial real estate sector into the reporting population will potentially influence decisions related to grid capacity strategies, enterprise economics, the environment, and sector practices. Negative impact related to reporting overhead is minimal. Consumption data pulled from energy invoices has, is, and will continue to be collected and analyzed by the corporate real estate sector and corporate real estate groups. Any reporting overhead can easily be negated by the economic benefit and branding opportunities provided by programs such as the EPA Energy Star. Leveraging EPA Energy Star's Portfolio Manager would be an optimal reporting mechanism for the commercial real estate sector, while allowing transparent upgrades to conversion algorithms. For example, collecting data that would have been required under this rule and using Energy Star and Climate Leaders would have allowed one of our clients to institute a pilot program that reduced energy consumption by 6 percent, their carbon footprint by 14 percent, achieved Energy Star ratings for their buildings, improved recruiting and retention, and achieved a 30-percent reduction in corporate real estate cost, while avoiding a \$70 million capital investment. I recognize that these considerations may be on the fringes or even outside the purview of this rule, but let's face it, what gets measured gets done, and given our current energy, economic, and environmental issues, we need to simultaneously work within the charter for developing this rule, while optimizing the rule's ability to contribute to the resolution of these other pressing issues. It behooves us to stretch the envelope. Otherwise, the return on effort generates a passive reporting tool and fits within the category of business as usual. So I vigorously encourage the EPA to consider including the corporate real estate sector in the reporting population, look at owned buildings using portfolio as their minimum threshold versus individual buildings, do not include leased buildings in order to avoid the potential of double counting administrative overhead and rule complexity, combine consumption data with CO₂ data for this particular group since they are not builders and do not necessarily have to have the same level of rigor in providing informed decision-making, and at a minimum, collect the consumption data.

Response: The rule does not require the reporting of building energy use in the commercial real estate sector. While EPA recognizes that monitoring and tracking building energy use to identify efficiencies and inefficiencies in building construction, management, and sector practices is valuable and encourages this practice, those activities are outside the scope of this rulemaking, which generally is designed to collect emissions data from facilities over a certain threshold and suppliers. As we move forward with policy development, we will consider these issues carefully. There are existing State and Federal programs to help the commercial real estate sector track and reduce its energy use. For example, EPA's ENERGY STAR Program provides proven energy management strategies and offers tools and resources to help energy users, including the real estate industry, to track and reduce energy use.

However, it is important to note that if a commercial real-estate facility has direct emissions that exceed the reporting threshold of 25,000 metric tons of CO₂e per year, it would be required to report under the rule (emissions in this sector would most likely come from stationary fuel combustion).

Commenter Name: Mike Fusco

Commenter Affiliation: Safety-Kleen Systems, Inc

Document Control Number: EPA-HQ-OAR-2008-0508-0212h

Comment: We are here to highlight the importance of life-cycle thinking in achieving our national GHG management objectives. In many cases, a focus on facility-level emissions may serve to inhibit much larger scale emission reduction achievements. Our industry, the recycling business, serves as a model case in point here an increase in facility-level emissions may realistically represent a decrease in national-level emissions. Safety-Kleen is principally a recycling business, involved in the recycling of used oil and various petroleum-based solvents generally used as cleaning solvents. Safety-Kleen is the largest oil re-refiner and is one of the largest solvent recyclers in North America. Our East Chicago, Indiana, facility re-refined approximately 109 million gallons of used oil into base oil and enhanced it to make lubricating oils, hydraulic oils, and oils for other industrial applications. The products of this re-refining meet the very same standards as the identical products derived from virgin crude oil. In addition, the company has five recycle centers that recycled in 2008 approximately 13 million gallons of used mineral spirits solvent into recycled solvent product. The clean solvent meets all Safety-Kleen and our customers' specifications. In all likelihood, our East Chicago refinery and one or more of our recycle centers may be required to report their greenhouse gas emissions when this proposal is finalized. Reporting may be required because the GHG emissions of one or more of these sites may exceed 25,000 metric tons of CO₂ equivalent annually. Safety-Kleen understands the need for these sites to report GHG emissions. However, we want to make sure that EPA considers actions for use of this and other reported data that the total GHG mitigation benefits of our re-refining and recycling businesses are also considered. Let me explain this further. In 2008, Safety-Kleen hired ENSR Corporation, a California Climate Action Registry or CCAR-certified Technical Assistance Provider, to conduct a GHG benchmarking study, in accordance with CCAR standards, to look at the GHG emission savings of re-refining used oil into products versus the refining of virgin crude oil into the same products and then the subsequent burning of that waste oil, which is generally what happens to waste oil instead of being re-refined. ENSR also looked at the greenhouse gas emissions of recycling of solvents into product versus the refining of virgin crude oil into the same product and the burning of spent solvent. ENSR concluded that Safety-Kleen's re-refining of 100 million gallons of used oil in 2006 resulted in the net reduction of over 205,000 tons of GHG emissions, the equivalent of approximately 141,000 automobiles in operation, when compared to the emissions of the life cycle of the same volume of crude oil that would be refined, then used, then disposed. At the same time, ENSR studied the GHG emissions for Safety-Kleen's Denton, Texas, solvent recycle facility. That facility produced 2.5 million gallons of solvent product in 2006. ENSR concluded that Safety-Kleen's recycling at that one facility resulted in a net reduction of 4,734 tons of GHG emissions, the equivalent of the operation of approximately 3,000 cars per year, compared to the emissions from the life cycle of the same volume of solvents being refined from crude oil, then used and disposed. The EPA has long recognized environmental benefits of re-refining used oil and recycling spent solvent and calls re-refining on its website, quote, "the preferred option because it closes the recycling loop by reusing the oil to make the same product that it was when it started out and, therefore, uses less energy and less virgin oil," unquote. Our concern is that restricting emissions from our facilities without giving those facilities credit for other greenhouse gas emission reductions and taking into consideration other environmental benefits may actually discourage re-refining and recycling and result in higher GHG emissions overall. It certainly will not increase re-refining used oil and recycling spent solvent, which we believe will be one of the keys to overall emission reductions. In order to improve the likelihood that used oil re-refining and spent solvent recycling grows, along with their GHG emission reduction effect, we advocate that emissions reported from our sector be tracked differently from other sectors.

Response: EPA thanks the commenter for the information, which we will consider as we evaluate CAA options to address GHG emissions and climate change. However, in this rule, EPA is focusing on collection of data on direct GHG emissions from facilities above thresholds and on quantities supplied by upstream suppliers of fuels and industrial GHGs. Therefore, the rule does not allow for netting of emissions or the consideration of offsets in determining applicability to an emissions threshold.

While we are not requiring evaluation or reporting of life-cycle emissions under this rule, EPA recognizes that life cycle analyses can be useful for many purposes such as determining a facility's or product's overall carbon footprint. Moreover, this rule is only one of many programs related to GHG emissions and climate change.

Commenter Name: Joseph Hezir

Commenter Affiliation: EOP Group, Inc

Document Control Number: EPA-HQ-OAR-2008-0508-0212v

Comment Excerpt Number: 2

Comment: We wanted to point out that the role that the particularly local distribution utilities play in making purchase power decisions is a very critical element in achieving greenhouse gas reductions because many utilities do have control over what source of power they buy. They can exert a lot of influence over what sources of power make it to the marketplace and the greenhouse gas characteristics of those sources of power. Furthermore, many local distributors are engaged in significant voluntary greenhouse gas emission reduction programs through, for example, purchases of green power which they then pass along to their customers. So, consequently, this inventory or this Reporting Rule as it is now drafted, while it would capture the national totals, it would not necessarily provide recognition to those distribution companies who are taking certain actions today to reduce greenhouse gas emissions.

Response: EPA thanks the commenter for their input. The purpose of this rule is to provide a consistent and accurate national dataset that will inform future climate change policies and programs. It is not intended to provide recognition to companies who are taking early actions to reduce GHG emissions, but to simply collect GHG emissions data from direct emitting facilities and suppliers of fuels and industrial GHGs consistent with the Congressional Request FY 2008 Appropriations Act. As discussed in the preamble, this rule is only one specific action among many Federal, State and regional programs.

Commenter Name: G. H. Holliday

Commenter Affiliation: Holliday Environmental Services, Inc. **Document Control Number:** EPA-HQ-OAR-2008-0508-0170.1

Comment Excerpt Number: 2

Comment: Volcanic actions are major contributors to greenhouse gases and volcanoes are part of the economy, being a tourist attraction. Mount Redoubt,

http://www.avo.alaska.edu/activity/Redoubt.php, has erupted frequently during 2009. The State of Alaska says; "The most common volcanic gas is water vapor, followed by carbon dioxide and sulfur dioxide." Similarly, Kilauea volcano continues to erupt, spewing greenhouse gases unabated. EPA recognizes the Clean Air Act makes no provision for Acts of God. Thus, U.S.

Government is obligated under the proposed rule to include government GHG estimates; and EPA is obligated to place a threshold of GHG for these two Park areas and perhaps many more parks, e.g., Yellowstone.

Response: Consistent with existing international, National, regional, and corporate level GHG reporting programs, the rule focuses on anthropogenic sources of GHG emissions. The purpose of the rule is to collect data on GHG emissions from anthropogenic sources for use in developing GHG policies and programs. EPA is focusing this rule on collection of data from facilities above thresholds on their direct emissions and collecting data from upstream suppliers of fuels and industrial GHGs on the quantities supplied and the GHGs that could ultimately be emitted when the product is combusted or used. Collecting data on GHGs emitted to the atmosphere as a result of natural activities, such as volcanoes, is outside the scope of this rulemaking and does not support it's intended purpose to inform decisions regarding CAA options to address GHG emissions and climate change. There are mechanisms other than this reporting rule for estimating natural sources of GHG emissions.

Commenter Name: Joseph Hezir

Commenter Affiliation: EOP Group, Inc

Document Control Number: EPA-HQ-OAR-2008-0508-0212v

Comment Excerpt Number: 3

Comment: We just wanted to point out that the Obama administration has launched a major new initiative in the power sector dealing with the so-called "Smart Grid." In the Smart Grid Initiative, there will be an increasingly important role played by local distribution utilities in both control-of-power systems, dispatch, communication, and interaction between the dispatch of power and the demand-side management of that power. So, as we see this going into the future, we see the Smart Grid Initiative as actually, potentially yielding additional benefits in terms of greenhouse gas emission reductions, and we would see the local distribution utilities as being the key players in bringing about those reductions. So, having said all of that, they would have a major role, but, nonetheless, their efforts would not necessarily be captured, at least directly, in this Reporting Rule. So I am just saying in conclusion, then, we think that in any future mandatory greenhouse gas emission reduction program, the role of purchase power and the attribution of indirect emissions will be a very critical element, and there will be important incentives there for various companies to take action. However, for purposes of this rule, we would support the position that EPA has taken, which is not to include them in the current reporting requirement, and we think this is probably one area that may potentially need to be revisited at some point in the future as the policy and the programs, specific programs for greenhouse gas emission reductions are put in place.

Response: EPA thanks the commenter for their input.

Commenter Name: Dale E. Furrow

Commenter Affiliation: The George Washington University School of Public Health MPH

Candidate

Document Control Number: EPA-HQ-OAR-2008-0508-0219.1

Comment: Facilities which meet the reporting threshold of the rule must comply with GHG emission tracking, reporting, recordkeeping, and verification requirements. Some requirements apply to all facilities, while others are particular to the types of sources present within a particular facility. As a result the facilities may fall into multiple categories covered under the standard and it is unclear in which category they should report data. In addition, because the reporting requirements apply to all sources exceeding the threshold limits, in some cases both the supplier and the end user of products which generate emissions must report. Clarification should be provided regarding how this data is reported to avoid redundancy.

Response: The reporting rule requires the owner or operator of a facility that meets the reporting threshold to report its greenhouse gas emissions from all source categories for which there are methods developed and listed in the rule. Facilities are required to report (1) total GHG emissions in metric tons CO₂e and (2) separately present annual mass emissions of each individual GHG for each source category at the facility along with the supporting data elements specified in the relevant source category subparts. In addition, some facilities such as petroleum refineries are both direct emitters and suppliers. Such reporters would report the information specified by the relevant supplier source categories (subparts KK through PP) as well as facility direct emissions for the relevant source categores in subparts C through JJ. EPA is designing an electronic data reporting system that will guide reporters through data entry and submission. It will allow reporters to submit the required information for multiple source categories at their facility. See also response to comments volume 12 regarding questions about applicability generally.

Commenter Name: William Ferretti

Commenter Affiliation: Chicago Climate Exchange

Document Control Number: EPA-HQ-OAR-2008-0508-0212m

Comment Excerpt Number: 4

Comment: We recommend that entities that are not required to report be given the option to do so voluntarily. A full and robust response to reducing greenhouse gas emissions will benefit greatly from the maximum possible opportunity to participate from across the economy, and we believe there are many entities with modest emissions levels that will want to contribute to the national reporting system that the agency adopts.

Response: As described in section IV.C of the proposal preamble (74 FR 16467 – 16470, April 10, 2009) and comment responses in the section of the promulgation preamble containing responses on thresholds, EPA selected emission thresholds, above which facilities and suppliers would be required to report. The selected thresholds result in coverage of the majority of U.S. GHG emissions but exclude smaller facilities form the burden of reporting. EPA estimates that the final rule will cover approximately 85 percent of U.S. GHG emissions. The objective of this program is to obtain a comprehensive and consistent national dataset of emissions from the reporters that meet the thresholds to help inform future climate policy development. Given that the rule covers 85% of U.S. GHG emissions, the collection of additional voluntary data beyond what is required in the rule is not necessary to further the objectives of the program. In addition, data reported voluntarily would not be as useful for national program development, because it would be submitted by only those facilities/companies that elect to submit it, and would therefore not provide comprehensive national information. Different reporters would also likely calculate voluntary GHG emissions data using different methods so the accuracy and

comparability of data from different sources would be lower than the mandatory reports. Including the reporters in the same database as mandatory reporters could also confuse compliance with the mandatory reporting rule. We recognize however, that there are many useful reasons for voluntary reporting of emissions and emissions reductions. There are many other federal and state programs that allow voluntary reporting of emissions and emissions reductions, as described in section II of the proposal preamble, and we encourage companies to join such programs.

Commenter Name: Thomas W. Easterly

Commenter Affiliation: Indiana Department of Environmental Management (IDEM)

Document Control Number: EPA-HQ-OAR-2008-0508-0525.1

Comment Excerpt Number: 29

Comment: Indiana believes that the reporting of electricity purchases is unnecessary and should not be required. However, U.S. EPA should make provisions for voluntary reporting of electricity purchases by facilities that wish to report this information. It is unclear what value a mandatory reporting requirement would add to the proposed rule. Adding complex layers to the proposed reporting requirements is unnecessary. Depending on the benefits identified with the voluntarily reported data, additional facilities and sectors could be considered to report at a later date.

Response: For the response on reporting of electricity purchases and indirect emissions, please see the Section III.B. of the preamble. For the response on allowing voluntary reporting under this rule see the response to comment EPA-HQ-OAR-2008-0508-0212m, excerpt 4, above.

Commenter Name: Jeff A. Myrom

Commenter Affiliation: MidAmerican Energy Holdings Company **Document Control Number:** EPA-HQ-OAR-2008-0508-0581.1

Comment Excerpt Number: 56

Comment: The carbon capture and storage chain is presently largely theoretical and experimental. Thus, MidAmerican submits that it is too early for EPA to be issuing rules that can accurately quantify fugitive CO₂ emissions from carbon capture and storage. MidAmerican believes that EPA and other agencies should develop rules specific to the capture and storage of CO₂ in a separate, more comprehensive, rulemaking so as not to discourage the development of carbon capture and storage as a potential option in advancing low-carbon generation technologies. MidAmerican believes that the ongoing regional sequestration partnerships may be a valuable source of information regarding this issue.

Response: Subpart PP, Suppliers of CO₂, requires reporting of CO₂ captured and supplied into the economy. CO₂ transport, injection, and storage facilities are not required to report under subpart PP. See Section III.PP of the preamble for the response to the comment on carbon capture and storage (CCS) and the definition of this source category.

Commenter Name: James Sims

Commenter Affiliation: Western Business Roundtable

Document Control Number: EPA-HQ-OAR-2008-0508-1038.1

Comment Excerpt Number: 11

Comment: In the preamble to its proposed rule, EPA notes that "obtaining robust data on fugitive carbon dioxide (CO₂) emissions from the entire carbon capture and storage (CC S) chain would provide a more complete understanding of the efficacy of CCS technologies as an option for mitigating CO₂ emissions." The Roundtable agrees that such information will be important to the development and deployment of the CCS mitigation technology. We are concerned, however, that the current rule is not the appropriate vehicle for such an effort. We do believe a separate rule tailored specifically to the CCS chain, including fugitive emissions, makes sense. This would allow EPA to avoid piecemeal regulation of CCS and would complement the Underground Injection Control rule CO₂ sequestration injection wells proposed last year (see 73 Fed. Reg. 43492 (Jul. 25, 2008)) that addressed subsurface containment issues.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0581.1, excerpt 56.

Commenter Name: Emily Fisher

Commenter Affiliation: Edison Electric Institute

Document Control Number: EPA-HQ-OAR-2008-0508-0212.1d

Comment Excerpt Number: 5

Comment: Moving to carbon capture and storage issues, EEI and its members are strong proponents of CCS as a critical component in the suite of technologies needed to reduce greenhouse gas emissions, while ensuring affordable and reliable electric service to customers. We agree with EPA that now is not the time to require CCS operations and EOR operations that also store carbon dioxide to report fugitive emissions of CO₂. We also agree that obtaining data on fugitive emissions from these projects may be useful in demonstrating the efficacy of geological CO₂ storage. Consistent with the comments we filed on EPA's Proposed Underground Injection Control Rule for Geologic Storage of Carbon Dioxide, EEI urges EPA to ensure that any reporting burden imposed on CCS operators be consistent with the risk of CO₂ emissions from storage sites. If CO₂ is properly captured, transported, and injected into appropriate geologic formations, the risk of emissions is extremely low. In fact, emissions from CCS projects might not meet the 25,000-tons-per-year threshold generally used in this Proposed Rule. Therefore, it might be more appropriate for EPA to promulgate separate rules addressing the possible air impacts of CO₂ emissions and the efficacy of CO₂ storage.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0581.1, excerpt 56.

Commenter Name: Dale E. Furrow

Commenter Affiliation: The George Washington University School of Public Health MPH

Candidate

Document Control Number: EPA-HQ-OAR-2008-0508-0219.1

Comment Excerpt Number: 7

Comment: As with the "per-facility" reporting requirements, the rule does not require compilation of emissions from collections of vehicles owned by one corporation. Thus, companies operating large fleets of vehicles (such as rental car companies or bus companies) which would be required to report their emissions otherwise would be excluded. According to the Environmental Defense Fund 2006 report entitled "Global Warming on the Road," approximately 45% of the world's auto emissions come from the U.S. Automobile manufacturers will be required to report emissions for the vehicles they produce, but this does not include previously purchased privately owned vehicles. Most existing cars are individually owned and will not be counted under the rule because private owners will fall well below the threshold; however, large fleets of vehicles could be included, adding more data points to the system and improving accuracy of the data.

Response: The rule requires reporting by manufacturers of new mobile sources, including motor vehicles and engines, nonroad vehicles and engines, and aircraft engines. For the response to the comment on including fleet vehicle reporting, see the comment response volume on mobile sources for responses.

Commenter Name: Anonymous **Commenter Affiliation:** None

Document Control Number: EPA-HQ-OAR-2008-0508-0166

Comment Excerpt Number: 4

Comment: Insure that mobile sources are NOT included, especially for fleet operators.

Response: See the comment response volume on mobile sources for responses to comments on whether fleet vehicle reporting should be required.

Commenter Name: Kusai Merchant

Commenter Affiliation: Environmental Defense Fund

Document Control Number: EPA-HQ-OAR-2008-0508-0212.1h

Comment Excerpt Number: 8

Comment: Inclusive reporting has far-reaching benefits. We respectfully urge EPA to develop inclusive reporting requirements. A comprehensive national reporting program will have multifaceted benefits. At the source of business level, having accurate greenhouse gas emissions data will help facilities and companies manage and reduce their emissions. Sources that measure and report emissions may take early action to begin reducing emissions and smooth their transition to mandatory reduction obligations. Some sources may be required to report emissions but be outside the scope of emission reduction requirements. In such cases, reporting may help facilitate the generation of cost-effective emission offsets. Policy-makers need accurate measurement of emissions to establish the proper scope of emissions reduction requirements and to assess the efficacy of policies. Therefore, to maximize greenhouse gas management at the source level and give policy-makers the information necessary to develop well-designed emission reduction requirements, the mandatory reporting program should be inclusive. We ask EPA to carefully consider the full range of benefits from establishing inclusive requirements.

Response: The comment does not specify what is meant by inclusive reporting. The source categories and thresholds included in the final rule result in reporting of approximately 85 percent of U.S. GHG emissions. See the preamble to the proposed rule and the preamble to the final rule for rationale and comment responses on selection of source categories to report and selection of thresholds.

Commenter Name: Dale E. Furrow

Commenter Affiliation: The George Washington University School of Public Health MPH

Candidate

Document Control Number: EPA-HQ-OAR-2008-0508-0219.1

Comment Excerpt Number: 8

Comment: The basic premise behind the proposed rule is that the EPA already knows who the large GHG producers are, and this rule will require those emitters to provide the data needed to support development of new policy ultimately designed to reduce their emissions. In practice, the highest emitters are providing EPA the data needed to draft and enforce future regulation. If extra consideration is not taken to ensure the data are as comprehensive as possible and potential loopholes are not eliminated, the data may fail to adequately provide a clear path forward. The funds spent to administer this data collection rule (both public federal funds and private industry funds) would be better spent enacting rules requiring the known high producers, already believed to contribute 85-90% of the emissions, to take immediate action to reduce GHG.

Response: The purpose of the rule is to have consistent and comprehensive coverage facility-level emissions data from the largest sources of GHG emissions (those that meet the thresholds in the rule). The facility-level emissions data and supplier data collected by the rule will provide a more detailed, complete and consistent dataset than is currently available and will provide crucial information for the development of GHG policies and programs. Also, the FY2008 and FY2009 Appropriations Acts required that certain monies be spent on this program and not on anything else.

Commenter Name: David W. MacFarlane

Commenter Affiliation: Professor, Forest Measurements and Modeling Lab, Department of

Forestry, Michigan State University (MSU)

Document Control Number: EPA-HQ-OAR-2008-0508-0152

Comment Excerpt Number: 1

Comment: The Proposed Mandatory Greenhouse Gas Reporting Rule (Docket ID No. EPA-HQ-OAR-2008-0508) seems to only deal with reporting gross emissions, with no references to potential offsets. If this will not be addressed under this or other subsequent rules, it would be a glaring omission in Greenhouse Gas accounting/ reporting system. The rules require that sources above certain threshold levels monitor and report emissions, but without specific rules for offsets the thresholds will pertain to gross rather than net emissions. Offsets are an important part of mitigation/ management of GHGs. What are the plans for dealing with offsets?

Response: For the response on reporting of gross or net emissions and offsets, see the preamble section containing responses on source categories to report.

Commenter Name: Ushma N. Domadia

Commenter Affiliation: Drexel University Earle Mack College of Law

Document Control Number: EPA-HQ-OAR-2008-0508-0234

Comment Excerpt Number: 7

Comment: Overall, despite reporting guidelines set forth in this proposal, some information may have to be estimated. For example, a company that shares a building with others may not be able to accurately measure its energy consumption. Measurements would need to be estimated based on a number of variables. It is necessary to determine which activities should be included in the company's measurements. For example, the proposal doesn't address inclusion of business travel. Companies might also want to take into consideration issues such as employee commute, supplier emissions and product transportation. Such questions demonstrate the challenges in drawing appropriate boundaries.

Response: This rule does not require reporting of indirect emissions such as building electricity purchases, employee commuting, or travel. See the preamble section on electricity purchases for responses to comments on reporting of electricity purchases and indirect emissions.

Commenter Name: Timothy O'Connor

Commenter Affiliation: Environmental Defense Fund

Document Control Number: EPA-HQ-OAR-2008-0508-0228h

Comment Excerpt Number: 1

Comment: I'm heartened to see that U.S. EPA has gone a little further in tackling some of the issues that WCI has sort of left on the table, and particularly those issue related to wastewater, municipal and industrial landfills and livestock operations.

Response: EPA thanks the commenter for their input. At this time EPA is not going final with the wastewater treatment subpart or with reporting requirements for industrial landfills. As we consider next steps, we will be reviewing the public comments and other relevant information. Thus, we are not responding to comments on wastewater treatment and industrial landfills at this time. The final rule continues to cover municipal solid waste landfills.

Commenter Name: Michel R. Benoit

Commenter Affiliation: Cement Kiln Recycling Coalition (CKRC) **Document Control Number:** EPA-HQ-OAR-2008-0508-0467.1

Comment Excerpt Number: 1

Comment: CKRC has unique concerns with the proposed GHG reporting requirements, principally with a deficiency in accounting for the positive effects of energy recovery from hazardous waste. Certain energy-bearing hazardous waste materials, such as spent solvents, are prohibited by EPA's Land Disposal Restriction (LDR) regulations from land disposal without prior treatment. When these kinds of wastes are used in place of fossil fuel to fire cement kilns, there is a net positive effect on emissions of carbon dioxide and other greenhouse gases. That is because proper and legally-compliant disposal of these materials dictates that they must be treated, and most typically they are thermally treated or combusted as prescribed in the LDR

regulations. Accordingly, because they are destined to be combusted, their use as a substitute for fossil fuel in a cement kiln avoids the CO₂ emissions that would occur if the wastes were simply burned for destruction in incineration units and not used in place of fossil fuels in the manufacture of necessary products. In this real-world scenario, the CO₂ emissions from using the waste as fuel in cement kilns are relatively unaffected (due to direct replacement of fossil fuel by waste-derived fuel) while the emissions from incinerating the waste are completely avoided. Any EPA regulation for measuring and accounting for greenhouse gas emissions should be structured to accommodate emissions avoidance techniques such as described above. CKRC urges the Agency to place appropriate value on any practices that have a net positive effect on overall GHG emissions and to develop the mechanisms necessary to include the positive effects of those practices in a facility's greenhouse gas emissions inventory.

Response: The rule requires reporting of direct emissions for facilities. See the preamble sections (III.C and III.H), the comment response documents on subpart C (general stationary fuel combustion) and subpart H (cement production), and Volume 12 (Subpart A: Applicability and Reporting Schedule) for responses to comments on reporting of hazardous waste combustion emissions from cement kilns and other stationary combustion units.

Commenter Name: Joseph J. Croce

Commenter Affiliation: Virginia Manufacturers Association (VMA) **Document Control Number:** EPA-HQ-OAR-2008-0508-0526.1

Comment Excerpt Number: 1

Comment: The VMA believes that an effective, comprehensive federal climate policy must account for all sectors of the economy in order to disperse regulatory requirements in a manner that will allocate the economic impact equitably across all sectors. Federal policy makers cannot implement such a policy without first having a registry that accounts for emissions from those sectors. The EPA must take steps to structure its reporting requirements in an equitable manner that accurately reflects each sector's share of GHG emissions to properly inform future climate policy. Focusing reporting requirements on one, or a handful of economic sectors will not only distort the true picture of domestic GHG emissions, but may also increase cost burdens on a particular sector through unfair regulatory compliance costs. This will undermine a disproportionately burdened sector's ability to compete internationally and provide jobs to an economy attempting to recover from the deepest recession the U.S. has witnessed since the 1930s.

Response: EPA is collecting data on direct emitting facilities above thresholds and on upstream suppliers of fuel and industrial GHGs, covering all sectors of the economy. The source categories covered are those that emit the most significant amounts of GHG emissions, have individual facilities about the thresholds, and for which relatively accurate GHG measurement and calculation methodologies are available. This approach covers approximately 85% of U.S. GHG emissions while excluding numerous small facilities from the burden of reporting. See the preambles to the proposed and final rule for additional discussion and responses on selection of source categories.

Commenter Name: Stephanie Castorina

Commenter Affiliation: Association Connecting Electronics Industries (IPC)

Document Control Number: EPA-HQ-OAR-2008-0508-0545

Comment Excerpt Number: 2

Comment: IPC also supports the narrow scope proposed in the rule. Focusing on direct sources of greenhouse gases, fossil fuel suppliers, and industrial greenhouse gas suppliers will give EPA the most accurate data in regards to determining where the bulk of greenhouse gases originate from.

Response: EPA thanks the commenter for their input.

Commenter Name: Steven D. Meyers

Commenter Affiliation: General Electric Company (GE)

Document Control Number: EPA-HQ-OAR-2008-0508-0532.1

Comment Excerpt Number: 2

Comment: At the present time the proposed Mandatory Program would limit reporting to direct (Scope 1) emissions for most industrial sources. GE agrees that direct emissions must be reported through the Mandatory Program because any federal legislation to reduce GHG emissions will likely address direct emissions. Therefore, GE agrees that the Mandatory Program should not cover indirect (Scope 2) emissions from purchased electricity, steam, hot water and chilled water. These emissions will be covered as direct (Scope 1) emissions, with the entity that generates the direct emissions reporting such emissions.

Response: EPA thanks the commenter for their input. See the preamble section on electricity purchases for the response to comments on reporting of electricity purchases and indirect emissions.

Commenter Name: Lloyd Stone

Commenter Affiliation: Westlake Chemical Corporation

Document Control Number: EPA-HQ-OAR-2008-0508-0442.1

Comment Excerpt Number: 2

Comment: Westlake agrees with EPA's proposal to collect data on direct emissions only. Requiring the submission of indirect emissions data would be extremely burdensome, particularly for large industrial facilities, because that data is not readily available and would result in the double-counting of emissions.

Response: EPA thanks the commenter for their input. See the preamble section on electricity purchases for the response to comments on reporting of electricity purchases and indirect emissions.

Commenter Name: Christian Richter

Commenter Affiliation: US Poultry & Egg Association, National Turkey Federation & National

Chicken Council

Document Control Number: EPA-HQ-OAR-2008-0508-0577

Comment Excerpt Number: 3

Comment: We agree with and urge the Agency to ensure that CO₂ from bird respiration as a natural biological process (i.e., breathing) is fully excluded as a component in calculating appropriate size thresholds for GHG reporting. The proposed reporting rule does not intend to cover respiration, consonant with the decisions of the Intergovernmental Panel on Climate Change.

Response: EPA thanks the commenter for their input. The rule does not require reporting of emissions from respiration.

Commenter Name: Ronald T. Evans

Commenter Affiliation: Denbury Resources, Inc.

Document Control Number: EPA-HQ-OAR-2008-0508-0484.1

Comment Excerpt Number: 3

Comment: The EPA is correct in deferring development of a "geologic sequestration" report. The proposed rule is not proposing to include geologic sequestration or long-term storage as a source category within the rule. The preamble indicates that there may be stakeholder interest in reporting the amount of CO₂ injected and geologically sequestered in EOR operations. Accordingly, the NOPR outlines some "initial thoughts" and suggests a possible approach for including geologic sequestration by asking EOR operators to submit a "geologic sequestration report". 74 Fed. Reg. at 16584. Denbury believes that the EPA's initial judgement in this regard was correct and that it is premature to try to develop such a methodology at this time. Such a standardized methodology and reporting mechanism would need to be crafted in such a way as to "mesh" with any regulatory system for measuring, verifying and monitoring CO₂ volumes injected for the purpose of geologic storage, for example, under a "cap and trade" or similar regime. Such a system is not likely to be finalized however until after legislative action by the Congress and the development of the implementation details through subsequent agency rulemakings. If the EPA were to attempt to craft methodologies and reports for geologic sequestration without knowing the exact details of the final rules, there would be a great risk that investments in information systems needed to comply and implement a rule adopted today would have to be modified later, imposing a potentially significant and unnecessary cost on companies planning for compliance. Accordingly, we support EPA's decision at present to defer further action to craft a geologic sequestration report until legislation governing carbon capture and geologic storage is actually adopted and implementing rules finalized. We would be happy to work with agency staff as the legislative process unfolds to assist in the ultimate development of such rules.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0581.1, excerpt 56.

Commenter Name: Karen S. Price

Commenter Affiliation: West Virginia Manufacturers Association (WVMA)

Document Control Number: EPA-HQ-OAR-2008-0508-0475.1

Comment Excerpt Number: 4

Comment: The WVMA supports the proposal of only reporting direct emissions of GHGs and is strongly opposed to the reporting of any indirect emissions. Reporting of indirect emissions would result in an inaccurate inventory of GHG emissions, which would appear to be contrary to the purpose behind creating a reporting protocol and resulting inventory.

Response: Please see the Section III.B. of the preamble for our response to comments on reporting of electricity purchases and other indirect emissions.

Commenter Name: J. Randall Curtis MD

Commenter Affiliation: American Thoracic Society (ATS)

Document Control Number: EPA-HQ-OAR-2008-0508-0510.1

Comment Excerpt Number: 4

Comment: We believe that the proposed rule has identified the appropriate industrial sources for mandatory reporting, provided adequate justification for the threshold for reporting emissions, captures the majority of anthropogenic GHG emissions and takes steps to reduce the regulatory impact for reporters. We believe the EPA has also made thoughtful recommendations as to when all sources in an industrial sector should be required to report.

Response: EPA thanks the commenter for their input.

Commenter Name: Shawn Glacken **Commenter Affiliation:** Luminant

Document Control Number: EPA-HQ-OAR-2008-0508-0549.1

Comment Excerpt Number: 4

Comment: Luminant believes it is inconsistent to not include all sources with GHG emissions and in not requiring at least estimation of emissions from smaller sources. As other sources are reduced, these smaller but numerous sources will become even more important. This is the equivalent of emission inventories of "area sources" under the Clean Air Act and 'non point sources' under the Clean Water Act.

Response: See the preamble for the response on the threshold for reporting.

Commenter Name: Willie R. Taylor

Commenter Affiliation: U.S. Department of the Interior

Document Control Number: EPA-HQ-OAR-2008-0508-0474.1

Comment Excerpt Number: 5

Comment: Greenhouse gas (GHG) emissions associated with prescribed fire events are not discussed in the proposed rule. Since these are biomass emissions and not fossil fuel based emissions, it is assumed that GHGs associated with prescribed fire will not be considered for reporting purposes under the mandatory rule. Please verify or clarify.

Response: Reporting of GHGs associated with prescribed fire events are not required under this rule. This rule covers stationary fuel combustion sources, but not prescribed fires or other land use management techniques.

Commenter Name: Olon Plunk

Commenter Affiliation: Xcel Energy Inc.

Document Control Number: EPA-HQ-OAR-2008-0508-0444.1

Comment Excerpt Number: 6

Comment: EEI, in its comments, agrees with EPA's recommended position that entities not be required to report indirect emissions. Xcel Energy endorses EEI's comments. In addition, Xcel Energy continues to participate actively in the development of broader emission reporting and verification in other venues, notably The Climate Registry. Based on this experience, we believe that EPA should allow voluntary efforts to develop appropriate procedures and protocols regarding indirect emissions measurement and estimation prior to a mandatory regulatory requirement. These efforts are bearing fruit, as shown by the new Electric Power Sector Protocol from The Climate Registry.

Response: EPA thanks the commenter for their input. States and others are free to develop broader reporting requirements. For the response to the comment voluntary reporting, see the response to comment EPA-HQ-OAR-2008-0508-0212m, excerpt 4.

Commenter Name: See Table 3

Commenter Affiliation:

Document Control Number: EPA-HQ-OAR-2008-0508-0440.1

Comment Excerpt Number: 7

Comment: Within the meat-processing source category, EPA identified emissions from stationary combustion units, onsite landfills, and onsite wastewater treatment systems as the key emission sources these facilities should consider when determining if reporting thresholds are exceeded (74 Fed. Reg. 16631). Stationary fuel combustion sources are common to the meat industry, primarily boilers for heating water for scalding and other carcass preparation, USDA-required carcass, equipment and facility cleaning and decontamination, steam production, and process heaters for further processing of retail meat products and byproduct rendering. However, onsite landfills at meat processing facilities are rare.

Response: At this time EPA is not going final with the food processing, landfills, and wastewater treatment subparts. As we consider next steps, we will be reviewing the public comments and other relevant information. Thus, we are not responding to comments on this subpart at this time. However, a meat processing facility could still be required to report under this rule if the emissions from their stationary fuel combustion sources exceed the threshold or if other source categories subject to the rule are located at the facility.

Commenter Name: Wesley L. McNealy

Commenter Affiliation: Pepco Holdings, Inc. (PHI)

Document Control Number: EPA-HQ-OAR-2008-0508-0547.1

Comment Excerpt Number: 7

Comment: PHI supports EPA's recommended position that entities not be required to report indirect emissions. If the purpose of the regulation is to develop a comprehensive picture of the U.S. greenhouse gas emissions, then the reports should focus on direct emissions. In PHI's view: 1. All relevant "indirect emissions" will already be reported under the proposed rule as "direct emissions." 2. If "indirect emissions" reporting is mandated, even if only for purchased electricity, double-reporting will occur. 3. Because indirect emissions will have to be an estimated amount, based on assumptions regarding the fuel mix providing the electricity, there will be no way to cross-verify indirect emissions with direct emissions. Thus the inclusion of indirect emissions in the reports will not provide any additional perspective on the quality of the estimates of direct emissions. Electricity distribution networks often blend electricity from multiple sources (e.g. nuclear-generated, wind-generated, and coal-generated electricity), thus, indirect emissions will not be easily traceable to the source of the direct emissions.

Response: Please see the Section III.B. of the preamble for our response to comments on reporting of electricity purchases and other indirect emissions.

Commenter Name: Charlie Burd and Nicholas DeMarco

Commenter Affiliation: Independent Oil and Gas Association of West Virginia (IOGA-WV)

and West Virginia and Natural Gas Association (WVONGA) **Document Control Number:** EPA-HQ-OAR-2008-0508-0516.1

Comment Excerpt Number: 9

Comment: The proposed rule requires the reporting of direct emissions of GHGs. Although not proposed by EPA, the Agency has requested comment on whether it should also require the reporting of indirect emissions of GHGs. The WV Associations support the proposal of only reporting direct emissions of GHGs and are strongly opposed to the reporting of any indirect emissions. Reporting of indirect emissions would result in an inaccurate inventory of GHG emissions, which would appear to be contrary to the purpose behind creating a reporting protocol and resulting inventory.

Response: EPA thanks the commenter for their input. Please see the Section III.B. of the preamble for our response to comments on reporting of electricity purchases and other indirect emissions.

Commenter Name: Traylor Champion

Commenter Affiliation: Georgia-Pacific, LLC (GP)

Document Control Number: EPA-HO-OAR-2008-0508-0380.1

Comment Excerpt Number: 10

Comment: GP requests allowing optional reporting of "carbon stored in products in use" for those products recognized to have such capacity (such as lumber). [FR16614 – §98.3(c)] Manufacturing operations subject to the registry proposal could potentially be included in future climate change regulatory controls. It is then proper that those facilities, if also manufacturing products with a recognized carbon stored capability, be allowed to register those quantities, separately, as a line item for accounting credit purposes if so allowed in the final legislation.

Both the IPPC guidance and the EPA, in the national GHG inventory report to the United Nations Framework Convention on Climate Change, have recognized the storing of carbon in products in use and in solid waste disposal sites (SWDS) as an accounting credit. In the EPA report to the United Nations, both the carbon in products in use and in SWDS are included and netted in the determination of the net GHG inventory for the United States for the year. The accepted methodology for quantifying the annual credits from carbon stored in products in use is the "one hundred year" method of ICFPA/NCASI. [Footnote: Minor, R. and B. Upton, "The 100-Year Method for Estimating Long-Term Carbon Storage in Forest Products-in-use". ICFPA/NCASI, Draft August 19, 2005]. This method is explained and made available in Excel format and is applicable to each manufacturing facility with recognized product candidates for this credit. GP requests EPA add a section under §98.3(c)(4), specifically §98.3(c)(4)(v), stating: (v) Optional Reporting. For the capable manufacturing facilities, separately report the calculated annual quantity of product carbon stored in products in use, expressed in metric tons of CO₂e, per the discounted 100-year method described in subpart OO. EPA would also need to incorporate a subpart OO detailing the ICFPA/NCASI 100-year method for determining the amount of carbon stored in products in use.

Response: For the response on reporting of carbon sequestration in biomass or harvested wood products, see the response to comment EPA-HQ-OAR-2008-0508-0525.1, excerpt 25 in this document.

Commenter Name: Angus E. Crane

Commenter Affiliation: North American Insulation Manufacturers Association (NAIMA)

Document Control Number: EPA-HQ-OAR-2008-0508-0537.1

Comment Excerpt Number: 11

Comment: Reporting indirect emissions is unnecessary. NAIMA affirms EPA's decision to not require reporting of indirect emissions and urges EPA to not add such a reporting requirement in the future.

Response: EPA thanks the commenter for their input.

Commenter Name: Rasma I. Zvaners

Commenter Affiliation: American Bakers Association (ABA) **Document Control Number:** EPA-HQ-OAR-2008-0508-0497.1

Comment Excerpt Number: 12

Comment: Emissions from fuels combusted for heating purposes, for example in baking ovens, can readily and more efficiently be accounted for upstream by the gas processor and should not be considered part of a facility's actual on-site emissions. An EPA system that would streamline greenhouse gas emissions reporting and avoid double or triple reporting is recommended.

Response: For the response reporting of upstream and downstream emissions, see the response to EPA-HQ-OAR-2008-0508-0979.1, excerpt 3. With respect to baking, at this time EPA is not going final with the food processing subpart. As we consider next steps, we will be reviewing the public comments and other relevant information. Thus, we are not responding to comments on

this subpart at this time. However, a food processing facility is required to report if their stationary fuel combustion emissions exceed the threshold.

Commenter Name: Niki Wuestenberg

Commenter Affiliation: Republic Services, Inc.

Document Control Number: EPA-HQ-OAR-2008-0508-0557.1

Comment Excerpt Number: 13

Comment: Specifically with regard to mobile sources, Republic understands that EPA's proposal would not require landfills to report the emissions from any onsite vehicles used in landfill operations or any vehicles used in the collection of waste that is delivered to the landfill. Republic agrees with this approach – reporting vehicle emissions would be extremely onerous and would unnecessarily duplicate the information on mobile sources that EPA already seeks to obtain through other means.

Response: EPA thanks the commenter for their input. The final rule does not require reporting of emissions from the operation of mobile sources at stationary sources.

Commenter Name: See Table 10

Commenter Affiliation:

Document Control Number: EPA-HQ-OAR-2008-0508-0395.1

Comment Excerpt Number: 24

Comment: TCFA submits that any facility that implements technology to destroy carbon or convert GHGs with high global warming potential to those GHGs with a lower global warming potential should be allowed to account for the net carbon reduction in their GHG emissions estimates. Therefore, TCFA supports the "emissions threshold" approach, which takes into account and deducts CH₄ that is destroyed from the total CH₄ generation. Again, however, any cattle feeding operation that chooses or is able to expend the large amount of money necessary to utilize or install carbon reduction technologies resulting in emissions falling below the threshold level should no longer be required to report GHG emissions to the EPA. This should be one of the benefits of taking such actions.

Response: For the response to the comment on reporting net reductions in GHGs, see the response to comment EPA-HQ-OAR-2008-0508-0228b, excerpt 6. Provisions have also been added to the final rule to allow reporters to cease reporting when multiple years of annual reports demonstrate emissions below a specified level. See the preamble for the response on thresholds and the response on reporting frequency and provisions to cease reporting.

Commenter Name: William Koetzle

Commenter Affiliation: Chevron Corporation

Document Control Number: EPA-HQ-OAR-2008-0508-0352.1

Comment Excerpt Number: 1

Comment: Chevron believes petroleum fuel refiners, importers, and exporters should not have to conduct additional reporting on petroleum feed stock and product volumes and GHG

emissions to EPA. We already provide extensive data on the volumes of finished petroleum products and feed stocks to other federal and state agencies on a weekly, monthly, and annual basis. These existing reporting programs moreover provide essential protection of these competitively sensitive data as Confidential Business Information (CBI). EPA's proposed rule would establish duplicative reporting requirements and raises questions regarding EPA's legal authority to protect this sensitive data as CBI. EPA should coordinate with agencies like the Department of Energy (DOE) and Customs and Border Protection (CBP) to make use of existing reporting data and processes to support development of future climate policy.

Response: For responses to specific comments on the data elements required to be reported for each supplier source category, see the preamble sections and comment response documents for the relevant supplier source categories. In general, data collection needs to be uniform and consistent so that complete national data are available for use by EPA, policy makers, and other stakeholders. These data must also be available in as timely a manner as possible for use in developing future GHG policies. To meet these data consistency and timeliness constraints, and to serve policy objectives, it is most efficient to have the emissions data and other data elements necessary for verification submitted directly into one central EPA system and have centralized data verification. EPA will work with the States and other Federal agencies to ease the burden on sources that must report to both State and Federal systems by harmonizing data management where possible. See the preamble for the response on CBI. For the response to the comment on relying on DOE data for petroleum product information, see Section III.MM.3 of the preamble.

Commenter Name: Mike Redman

Commenter Affiliation: The American Beverage Association (ABA)

Document Control Number: EPA-HQ-OAR-2008-0508-0582

Comment Excerpt Number: 1

Comment: Manufacturers of carbonated beverages use carbon dioxide as an ingredient in the beverage manufacturing process. In the US, all of the carbon dioxide used in beverage manufacturing originates as a byproduct of other industrial processes (such as fermentation, etc.) from other industries. No new or virgin carbon dioxide is manufactured for use in carbonated beverages. Since all of the carbon dioxide used in beverage manufacturing is a byproduct of other industrial processes, the carbon dioxide used as an ingredient in carbonated beverage manufacturing does not represent a new source of a greenhouse gas. Although ABA recognizes that carbon dioxide emissions from beverage manufacturing facilities represents a minute portion of overall greenhouse gas releases, reporting carbon dioxide emissions from carbonated beverage manufacturing would not reflect the "accurate and timely" information that EPA has outlined as its goal in the preamble to the proposal. ABA urges EPA to consider the unique circumstances described above and address this issue in any future steps during this rulemaking process. Carbon dioxide which is both a byproduct of other industrial processes and an ingredient in foods and beverages should not be subject to greenhouse gas reporting as such reporting would be both misleading and inaccurate.

Response: Under subpart PP (Suppliers of CO_2), industrial facilities that capture a CO_2 stream and supply it for commercial application must report quantities captured and supplied. The facility that purchases and uses the captured CO_2 would have to report facility direct CO_2 emissions only if the facility contains a source category covered by the rule and there are methodologies in the rule for reporting CO_2 process emissions for the specific industrial process.

At this time EPA is not going final with the food production subpart, so food and beverage production facilities would not report CO₂ process emissions under the rule. As we consider next steps, we will be reviewing the public comments and other relevant information. Thus, we are not responding to comments on food processing. However, we caution that food processing facility is still required to report stationary combustion emissions under the rule if their stationary fuel combustion sources exceed the threshold, or if other source categories covered by the final rule are co-located at the facility.

Commenter Name: Kevin Fay

Commenter Affiliation: International Climate Change Partnership (ICCP)

Document Control Number: EPA-HQ-OAR-2008-0508-0490.1

Comment Excerpt Number: 8

Comment: ICCP generally agrees with the Source Category determinations contained in the proposed rule. It is noted that EPA has proposed methods for source categories "that typically contribute a relatively significant amount to facility's total GH emissions." EPA should indicate if there is some "de minimus" level that serves as a bright line for this consideration. It should also indicate what process will be used for addition of new source categories, i.e., annually, every four years, etc. While we agree that reporting by fuel and industrial GHG suppliers is appropriate, it is not necessarily accurate for the Preamble to suggest at page 16466 that "the GHGs in these products are almost always fully emitted during use." This is simply not true for a variety of compounds that are used in both manufacturing processes or in products containing. The Agency should be cautious in its approach and utilization of this data and should have an ability to differentiate between emissions and contained use. Such distinctions could become important, particularly with the potential implementation of cap and trade programs. It is possible that certain industrial users may be more appropriately covered upstream or downstream, and that efforts should be made to do so in a manner that works for that sector and minimizes compliance costs.

Response: See preamble on source categories to report. We have evaluated a variety of quantitative and qualitative factors as discussed in the preamble section on source categories to report, and in more detail in individual source category subparts where coverage comments were received. This rule finalizes reporting requirements for approximately 30 source categories. See Preamble section II.K for a discussion on de minimis levels.

At this time, we are continuing to evaluate the other subparts included in the proposalFor comments regarding treatment of information from suppliers, see the preamble sections and comment response documents on the relevant supplier source categories for responses to specific comments on each source category, as well as the general response on reporting by both upstream and downstream sources in the response to comment EPA-HQ-OAR-2008-0508-0979.1, excerpt 3. One goal of this rule is to collect facility-specific emission data from facilities that exceed the selected emissions threshold across all sectors of the economy. Such data will inform the assessment of potential policies and programs that could be implemented under the CAA

Commenter Name: John R. Evans

Commenter Affiliation: LyondellBasell Industries

Document Control Number: EPA-HQ-OAR-2008-0508-0718.1

Comment Excerpt Number: 10

Comment: LyondellBasell supports the development of an accurate CO₂e inventory and encourages EPA to consider only those sources and source categories which are significant to the inventory. In the preamble to the Mandatory Reporting Rule EPA lists the estimated covered entities, emissions and costs by subpart, table VIII-1, FR page 16597. As detailed in this table, emissions from many of the source categories contribute less than one percent to the overall inventory. If the source categories with de minimus contribution (less than 1% of the inventory) are removed, a full ninety four (94%) of the CO₂e inventory is preserved. Given this, NPRA believes that EPA can produce an accurate and reliable inventory while at the same time removing sources and source categories from the rule. Removal of these small source categories would serve to reduce the administrative and reporting burden on the regulated community. Analysis of the wastewater treatment category's contribution to the overall CO₂e inventory provides an illustrative example of how a source category can be removed from the reporting requirements without jeopardizing the integrity of the overall inventory. As indicated in table VIII-1 of the preamble, GHG emissions from the wastewater treatment category contribute zero percent to the overall inventory. In fact, table VIII-1 indicates that EPA anticipates that zero wastewater treatment facilities will meet the threshold for reporting. It is presumed that table VIII-1 indicates the number of facilities which only have wastewater treatment facilities, and that would meet or exceed the reporting threshold. This does not, however, account for the number of wastewater treatment facilities that are co-located at facilities that would otherwise have to report, (e.g. Petroleum Refining). Review of the technical support document for petroleum refining reveals that CO₂e emissions from wastewater treatment facilities co-located at petroleum refineries account for only 0.43% of the petroleum refining sector's aggregate CO₂e emissions and only 0.02% of the total CO₂e inventory. Petroleum refining constitutes about 5% of the total CO₂e inventory. A similar conclusion is reached when analyzing the petrochemical production sector. LyondellBasell does not believe that the burden of monitoring, QA/QC, recordkeeping and reporting are warranted to estimate less than one percent of the CO₂e emissions from petroleum refining and petrochemical production sector. This is well within the range of calculation error give the calculation methodologies. NPRA therefore proposes that reporting of wastewater treatment emissions be removed from petroleum refining and petrochemical production subsections.

Response: See preamble and discussion of approach in the response to comment EPA-HQ-OAR-2008-0508-490.1, excerpt 8. With respect to wastewater treatment, at this time EPA is not going final with the wastewater treatment subpart. As we consider next steps, we will be reviewing the public comments and other relevant information. Thus, we are not responding to comments on this subpart at this time. For a list of source categories that are not included in the final rule at this time, see the preamble response on source categories to report. However, we are not setting fixed criteria for the percent of the national inventory that a source category must represent to be included in the reporting rule. As explained in the response to comment EPA-HQ-OAR-2008-0508-0490.1 excerpt 8, above, a number of criteria were considered in selecting source categories for regulation.

84

Commenter Name: Robert Garfield

Commenter Affiliation: American Frozen Food Institute (AFFI) **Document Control Number:** EPA-HQ-OAR-2008-0508-0402.1

Comment Excerpt Number: 1

Comment: AFFI respectfully recommends that for those GHG source categories contributing less than 0.5% to nationwide GHG emissions, EPA require reporting only from facilities in the source category that would otherwise qualify as a major source under Title V of the Clean Air Act. The bases for our recommendation are set forth in more detail below. The GHG Reporting Rule identifies food processing as a source category that emits GHGs from landfill operations, wastewater treatment systems, and stationary fuel combustion and for which EPA has set a facility-wide GHG reporting threshold of 25,000 MT CO₂e /yr. EPA has estimated total GHG emissions from this source category (excluding stationary fuel combustion) of some 10.9 MMT CO₂ which equals 0.152% of total 2007 nationwide CO₂e emissions. Including a proportionate share of stationary fuel combustion GHG emissions [footnote: That is, 0.152% of total estimated stationary fuel combustion emissions of 410 MMT CO₂e, see 74 Fed. Reg. at 16,482, or 0.63 MMT CO₂e.] in the food processing source category yields total estimated emissions of 11.53 MMT CO₂e, or 0.161% of total 2007 CO₂e emissions—an undeniably insignificant contribution to overall emissions.

Response: At this time EPA is not going final with the food processing, industrial landfills or wastewater subparts. As we consider next steps, we will be reviewing the public comments and other relevant information. Thus, we are not responding to comments on these subparts at this time. Note, however, a facility may still be subject to the rule if it exceeds the threshold for stationary fuel combustion. As explained in the response to comment EPA-HQ-OAR-2008-0508-0490.1 excerpt 8, above, EPA is not excluding source categories from reporting based on the specific percent of nationwide GHG emissions contributed by the source category as a whole.

Commenter Name: Gary F. Lindgren

Commenter Affiliation: Calumet Specialty Products Partner, L.P. **Document Control Number:** EPA-HQ-OAR-2008-0508-0626.1

Comment Excerpt Number: 9

Comment: EPA needs to ensure that indirect emissions are excluded.

Response: EPA thanks the commenter for their input. Please see the Section III.B. of the preamble for our response to comments on reporting of electricity purchases and other indirect emissions.

Commenter Name: Steven M. Maruszewski

Commenter Affiliation: Pennsylvania State University (Penn State) **Document Control Number:** EPA-HQ-OAR-2008-0508-0409.1

Comment Excerpt Number: 13

Comment: Most hospitals will not have to report under this rule. Institutions such as the Hershey Medical Center and other larger facilities may need to report. Because only a small portion of hospitals will be reporting, data provided would not be comprehensive for the sector.

California's Air Resources Board (CARB) mandatory reporting has a hospital exemption. Specifically, "Hospitals with a North American Industry Classification System (NAICS) code starting with 62" are exempt. (CARB, Regulation for the Mandatory Reporting of Greenhouse Gas Emissions, Subchapter 10: Climate Change, Article 2, SS 95101. Applicability) Penn State recommends that EPA provide a similar exemption for hospitals and other health care facilities.

Response: Since the intent is to collect consistent and comprehensive GHG emissions data from facilities above the applicable threshold across all economic sectors, the rule requires all non-R&D facilities that exceed the emission threshold of 25,000 metric tons of CO₂e per year from stationary fuel combustion sources to report. Any facility which meets this threshold, must report. Excluding hospitals that have CO₂e emissions from combustion units above the 25 MTCO₂e/year threshold would affect our ability to evaluate the impact of future Climate Change policies on this sector. EPA has taken steps to reduce the burden on smaller sources, including a adding a 30 MMBtu/hour applicability threshold and an abbreviated report for sources that consist of only combustion units. See the preamble for the response on the threshold.

Commenter Name: David Balabon

Commenter Affiliation: GreatPoint Energy, Inc.

Document Control Number: EPA-HQ-OAR-2008-0508-0458.1

Comment Excerpt Number: 2

Comment: Given our work with novel approaches to gasification and our deep commitment to minimizing carbon emissions through capture, we believe that federal support for any carbon reporting or control regime must hinge on greenhouse gas emissions rather than greenhouse gas creation. We have made carbon capture a key factor in our process, and we accordingly believe that the Agency and the Administration should continue to support carbon emission control (for example, through sequestration) by making certain that any carbon emissions reporting or control regime focuses on the emission, not the creation, of greenhouse gases.

Response: EPA thanks the commenter for their input. See the preamble section and comment response document for subpart PP (suppliers of CO₂) for responses to comments on reporting of carbon capture.

Commenter Name: Steven J. Rowlan

Commenter Affiliation: Nucor Corporation (Nucor)

Document Control Number: EPA-HQ-OAR-2008-0508-0605.1

Comment Excerpt Number: 13

Comment: Without this mechanism agency efforts to ultimately curb atmospheric carbon concentrations will be futile. Reporting and ultimately regulation will drive facilities to move emitting operations out of the reporting geographic area and "finish" goods within the United States rather than truly producing them here. Only by capturing all GHG emissions whether embedded in the product or emitted during the production of the product will EPA be able to truly impact what appears to be its intended goal.

Response: EPA thanks the commenter for their input. See the preamble for responses to comments on the reporting threshold, source categories to report and general reporting

requirements. See the preamble section and comment responses on the iron and steel production for the responses to specific comments on this source category.

Commenter Name: Nicole McIntosh

Commenter Affiliation: Consumers Energy

Document Control Number: EPA-HQ-OAR-2008-0508-0584.1

Comment Excerpt Number: 7

Comment: The EPA is currently not proposing that entities report indirect emissions and we would encourage that the final rule not deviate from the initial proposal in this regard. It is our belief that all indirect emissions will already be reported through this process as direct emissions and that if required, a great deal of double reporting will occur. In addition, because these indirect emissions will be a calculated amount, the opportunity for error in calculations is greater and there will be no way to verify the emissions with those that are directly measured (ie: from Continued Emissions Monitoring Systems (CEMS) at the electric generating facility).

Response: Please see the Section III.B. of the preamble for our response to comments on reporting of electricity purchases and other indirect emissions.

Commenter Name: Christina T. Wisdom

Commenter Affiliation: Texas Chemical Council (TCC)

Document Control Number: EPA-HQ-OAR-2008-0508-0638.1

Comment Excerpt Number: 3

Comment: TCC agrees with EPA's proposal to collect data on direct emissions only. Requiring the submission of indirect emissions data would be extremely burdensome, particularly for large industrial facilities, because these data are not readily available and would result in the double-counting of emissions.

Response: Please see the Section III.B. of the preamble for our response to comments on reporting of electricity purchases and other indirect emissions.

Commenter Name: Kelly R. Carmichael

Commenter Affiliation: NiSource

Document Control Number: EPA-HQ-OAR-2008-0508-1080.2

Comment Excerpt Number: 24

Comment: NiSource supports EPA's decision to report actual emissions as opposed to potential emissions. Potential-to-emit reporting would dramatically overstate GHG emissions.

Response: EPA thanks the commenter for their input. The final rule generally requires reporting of actual emissions.

Commenter Name: D. Lawrence Zink

Commenter Affiliation: Montana Sulphur & Chemical Company Inc. (MSCC)

Document Control Number: EPA-HQ-OAR-2008-0508-0505.1

Comment Excerpt Number: 17

Comment: Large service entities such as military operations, governments, fleet operations, aviation, trucking, highways, and railways, and water shipping account for high GHG emissions. Are they omitted? It would appear that they are, by effectively allowing de-aggregation. Are emissions from these activities single or double counted and tracked to the responsible owner/operator as is the case with the nonmilitary "stationary" class? If it is appropriate to aggregate all activities on a site for the purpose of meeting thresholds it appears to equally appropriate to aggregate all emitting activities under the control of a single owner. Fuel purchase records generally provide adequately accurate information as to the approximate location of the emissions for mobile or portable emissions. Does the currently proposed handling of such entities make sense if either accuracy or efficacy is the goal?

Response: The final rule requires GHG emissions data for each source category within a facility that is included in the rule. The commenter is correct that emissions from mobile sources at a facility are not required to be reported by the rule. Data on mobile source emissions is being collected through upstream reporting by mobile source and engine manufacturers and fuel suppliers. See the comment response document on mobile sources for responses to comments on reporting by fleet vehicles and other mobile sources. For the response reporting of upstream and downstream emissions, see the response to EPA-HQ-OAR-2008-0508-0979.1, excerpt 3.

Commenter Name: Dean C. DeLorey

Commenter Affiliation: Beet Sugar Development Foundation (BSDF) Environmental

Committee

Document Control Number: EPA-HQ-OAR-2008-0508-0559.1

Comment Excerpt Number: 19

Comment: One very important consideration that should be factored into any GHG accounting system is that agribusiness is integrally linked to their supplied raw product. In the case of the sugar beet industry, CO₂ uptake by the growing crop significantly exceeds the GHG generated by processing facilities. A GHG reporting system must not only account for emissions, but also for consumption in order to address overall impacts.

Response: For the response on sequestration of carbon through agricultural crops and other land uses, see the preamble section containing responses on source categories to report, and EPA-HQ-OAR-2008-0508-0525.1, excerpt 25.

Commenter Name: Filipa Rio

Commenter Affiliation: Alliance of Automobile Manufacturers (Alliance)

Document Control Number: EPA-HQ-OAR-2008-0508-0630.1

Comment Excerpt Number: 14

Comment: The Alliance accepts EPA's proposed reporting coverage of emission sources, particularly the requirement to focus on upstream sources as well as downstream sources. If cap-

and-trade along with other complementary measures, such as low-carbon fuel standards, are included in future GHG policy, the reporting program should focus upstream, seeking the broadest coverage possible. Upstream emissions reporting requirements for suppliers of fossil fuel and industrial gases will provide comprehensive emissions estimates necessary for effective development of future policy while also avoiding double-counting of emissions and minimizing the number of reporters. EPA was also directed to include reporting of emissions resulting from downstream sources. The Alliance originally suggested EPA require reporting that aggregates facility-level data into an entity-level (i.e., corporate-level) report, which would include an individual facility-level threshold. While we continue to support this form of entity-level reporting, EPA's downstream facility-level reporting proposal which addresses certain source categories is acceptable. The individual source categories proposed for reporting appear appropriate, but these categories may need to be revised if the reporting threshold is adjusted (as recommended by the Alliance in the following section). Our primary concern with reporting upstream and downstream data for stationary sources is the potential for data to be misconstrued by the general public. The Alliance recommends that upstream and downstream data be carefully qualified by EPA when released to the general public to avoid misrepresentation or double counting of emissions.

Response: EPA thanks the commenter for their input. For the response on reporting by both upstream and downstream sources and double counting, see the preamble section containing responses on source categories to report, as well as the level of reporting.

Commenter Name: Matthew G. Paulson

Commenter Affiliation: LLP on behalf of BCCA Appeal Group **Document Control Number:** EPA-HQ-OAR-2008-0508-0649.1

Comment Excerpt Number: 14

Comment: Although EPA has not proposed to require the reporting of indirect emissions, the Agency has requested comment on whether such emissions should be excluded. To meet EPA's stated goals in the proposal, information regarding indirect emissions and electricity consumption is unnecessary to develop future regulatory strategies to address GHG emissions. Accounting for either indirect GHGs and/or electricity consumption will add a layer of complexity and burden that outweighs any benefits.

Response: Please see the Section III.B. of the preamble for our response to comments on reporting of electricity purchases and other indirect emissions.

Commenter Name: Leslie Bellas

Commenter Affiliation: National Lime Association (NLA) **Document Control Number:** EPA-HQ-OAR-2008-0508-0520.1

Comment Excerpt Number: 13

Comment: The Proposed Rule Does Not Clearly State Whether Sources Will Be Permitted to Report Net Emissions. NLA seeks clarification on whether the Proposed Rule will permit facilities to report their net CO₂ emissions, taking into account CO₂ that is sequestered. As part of the Climate VISION Program, some lime plants report net emissions from their facility. The NLA Protocol permits plants to deduct from their facility process emissions CO₂ sequestered

during the production of precipitated calcium carbonate ("PCC"). [See NLA Protocol at 8-9 in Attachment 2 of DCN:EPA-HQ-OAR-2008-0508-0520.1 for discussion regarding calculation CO₂ sequestered in such processes] Carbon dioxide generated during lime manufacturing at multiple kilns can be captured and directly piped to a PCC plant, which reabsorbs (sequesters) CO₂ during the production of PCC. [See Diagram Showing Flow of CO₂ from Lime Plant to PCC Plant in Attachment 6 of DCN:EPA-HQ-OAR-2008-0508-0520.1]. Because this CO₂ is never emitted from the lime plant, it can be deducted from the estimate of lime process emissions. These lime plants can either report net facility emissions for all kilns combined or the facility can allocate net emissions for each kiln and report a single per kiln value.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0380.1 excerpt 40 in the volume of this document titled "Subpart PP: Suppliers of Carbon Dioxide".

Commenter Name: Mark Maslyn

Commenter Affiliation: American Farm Bureau Federation (AFBF) **Document Control Number:** EPA-HQ-OAR-2008-0508-0693.1

Comment Excerpt Number: 2

Comment: The proposed endangerment finding for GHG clearly states that, unlike some other criteria pollutants, GHG, either separately or collectively, do not directly endanger public health. The impacts alleged to endanger public health and welfare derive solely from the alleged effect these substances have on climate conditions, a condition inferred not from empirical data but from models that are extremely sensitive to input values and prior assumptions. We believe that these facts are important for EPA to keep in perspective before it establishes elaborate and burdensome reporting, monitoring and verification requirements on livestock producers and other segments of the economy.

Response: Several commenters have expressed concern regarding the science of climate change. This rule is not the appropriate forum for that discussion. EPA proposed findings that GHG emissions from new motor vehicles and engines contribute to air pollution which may reasonably be anticipated to endanger public health and welfare (74 FR 18886, April 24, 2009, "Proposed Endangerment and Cause or Contribute Findings for Greenhouse Gases Under Section 202(a) of the Clean Air Act"). The endangerment proposal has received over 350,000 public comments, covering the issues raised by the commenters on this reporting rule and many others. We will be responding to those comments as part of the process of completing that action.

Commenter Name: Thomas M. Ward

Commenter Affiliation: Novelis Corporation

Document Control Number: EPA-HQ-OAR-2008-0508-0561.1

Comment Excerpt Number: 21

Comment: Reporting of direct emissions, and not for indirect emissions - Novelis also supports the proposed reporting only for direct GHG emissions by each facility. Reporting of indirect emissions is highly problematic. For example, facilities that purchase electric power from the power grid may not be able to identify sources of electric generation such as from coal, natural gas, nuclear or hydroelectric. Without knowing the suite of generating sources used, especially for small and medium sized facilities, such reporting could result in potentially large errors. In

addition, indirect emission reporting would be difficult for facilities to address from year to year without extensive consultation with the entities supplying power. As such, the accuracy of such reporting will be difficult to certify for individual facilities without a time consuming and costly effort to verify such emissions with the direct energy producers. Given that electric utility generators would be reporting their respective emissions under the proposed program, separate reporting of indirect emissions by other faculties is essentially double reporting.

Response: Please see the Section III.B. of the preamble for our response to comments on reporting of electricity purchases and other indirect emissions.

Commenter Name: Jeff A. Myrom

Commenter Affiliation: MidAmerican Energy Holdings Company **Document Control Number:** EPA-HQ-OAR-2008-0508-0581.1

Comment Excerpt Number: 1

Comment: MidAmerican applauds three high level policy decisions made by EPA in this proposed rulemaking. MidAmerican strongly supports EPA's focus on direct emissions (Scope 1) and avoidance of indirect (Scope 2), and upstream and downstream (Scope 3) emissions for each facility and reporter. The exclusion of Scope 2 and Scope 3 emissions will avoid double counting and save EPA and reporters significant time and expense.

Response: EPA thanks the commenter for their input. Please see the Section III.B. of the preamble for our response to comments on reporting of electricity purchases and other indirect emissions.

Commenter Name: David Balabon

Commenter Affiliation: GreatPoint Energy, Inc.

Document Control Number: EPA-HQ-OAR-2008-0508-0458.1

Comment Excerpt Number: 1

Comment: The transformation of dirtier carbon sources to cleaner gas fuels (such as methane) can be accomplished by multiple means and processes, including our hydromethanation process, which would be collectively covered by the creation of a "Gasification" category in the regulations. As an alternative clean energy technology company, GreatPoint Energy views the elimination of any regulatory risk associated with greenhouse gas reporting and/or regulation as critical to our success and to the financeability of projects utilizing our proprietary hydromethanation process. This regulatory risk can be eliminated or substantially reduced by specifying the rules and calculus that specifically applies to how we must report greenhouse gas emissions from one of our facilities. We accordingly believe that a separate "Gasification" category should be created and structured in much the same manner as the "Coal to Liquids" category in the existing proposed regulations. By implementing this change in the proposed regulations, the Agency will make it clear that the emissions of greenhouse gases by the owners or operators of "Gasification" facilities are to be reported in the same manner as the emissions of greenhouse gases by the owners or operators of "Coal to Liquids" facilities.

Response: For liquid fuel - such as petroleum products and coal to liquid products - EPA concluded that the best point of reporting is the source that makes the product (refineries and

coal to liquid facilities). The number of facilities was sufficiently small to collect the data we needed without creating excessive burden. For natural gas, we concluded that the best point of reporting is the local distribution company and/or the large end-users that combust the gas. We concluded that gas production operations would not be appropriate reporting points for natural gas supply because there are tens of thousands of such facilities. Reporting by LDCs and large end-users instead minimizes the burden without compromising the data quality or breadth collected by EPA. Any gas produced at a coal gasification plant and injected into the gas transmission system will be reported either by an LDC or by the large end-user that pulls the gas directly from the transmissions system. Any gas produced at a coal gasification plant that is sold directly to an end-user will be reported by that end-user if it meets the appropriate reporting rule threshold. A coal gasification plant may have to report under Subpart C if it combusts any fossil fuels. A coal gasification plant may have to report under subpart C if it combusts any fossil fuels.

Commenter Name: Anton A. Chiono

Commenter Affiliation: The Pacific Forest Trust

Document Control Number: EPA-HQ-OAR-2008-0508-0539.1

Comment Excerpt Number: 1

Comment: The Pacific Forest Trust would like to commend the EPA on their proposed rule for the mandatory reporting of greenhouse gasses (GHGs). Accurate monitoring and accounting of both GHG emissions and sinks are critical to addressing global climate change, and the proposed rule is a firm acknowledgement of that fact. However, we believe that the proposed rule, and the EPA's efforts to address global climate change, could be greatly strengthened by the inclusion of the forest sector within mandatory reporting requirements. Forests are unique in that they can act both as a sink and a source of GHGs. The sustainable management and conservation of forests not only preserve the vast amounts of carbon stored in forest ecosystems, but also ensure the sequestration ability of these forests for years to come. Conversely, the loss of forests through degradation and conversion does not just release the carbon immediately stored in these ecosystems, but sacrifices untold quantities of future sequestration. As a growing body of research suggests that mere reductions in global GHG emissions will no longer be sufficient to stem the tide of climate change, it is apparent that technologies are needed to actually remove GHGs from the atmosphere. [Footnote: Solomon, S., Plattner, G., Knutti, R., and Friedlingstein, P. 2009. Irreversible climate change due to carbon dioxide emissions. PNAS. 106:6, pp. 1704-1709.] Forests are that technology. Currently, forestry and land use sequester approximately 884 million metric tons of carbon dioxide annually, or nearly 12% of all U.S. GHG emissions. [Footnote: 2 US EPA. Inventory of U. S. Greenhouse Gases and Sinks. 2007.] However, forests have the potential to sequester and store far more carbon—up to an additional 40 to 60 billion tons of carbon over the next half century.[Footnote: Congressional Budget Office. The Potential for Carbon Sequestration in the United States. 2007.] However, this sequestration depends on the continued existence and sustainable management of our forests—something that is jeopardized by increased harvest and the current rate of domestic forest loss. Forestlands in the U.S. currently are being deforested and converted at a rate of 1.5 million acres annually. [Footnote: 4 USDA Forest Service. Interim Update of the 2000 Renewable Resources Planning Act Assessment. 2007.] Over the next half century, 50 million acres are projected to be lost to deforestation from private forests alone. [Footnote: 4 USDA Forest Service. Interim Update of the 2000 Renewable Resources Planning Act Assessment. 2007.] While forests in the U.S. currently provide a carbon sink, this sink is declining, and is in jeopardy of disappearing unless forest loss and degradation

is halted. To address this problem, it is critical that policy makers have access to accurate carbon flux data on U.S. forestlands at a resolution sufficient to discern specific sources of forest loss and degradation. Including U.S. forests in a mandatory GHG reporting program is of paramount importance to achieving this goal and can be accomplished using existing data sources. The EPA currently excludes the forest sector from mandatory reporting requirements. In the EPA's Technical Support Document for Biologic Process Sources Excluded from This Rule, the EPA includes the following rationale for the exclusion of the forest sector from the proposed rule on mandatory GHG reporting:

- 1. A requirement for entity-level reporting from the forest sector would be redundant with the data already reported by the EPA's U.S. Inventory on Greenhouse Gas Emissions and Sinks. While the EPA's Inventory of U.S. Greenhouse Gas Emissions and Sinks (hereafter "the Inventory") currently reports on the net greenhouse gas flux from land-use change and the forest sector, the resolution of the information provided in the Inventory is sufficient only to monitor forest emissions and sinks at the coarsest of scales. Despite the alarming rate of annual private forestland conversion, the Inventory does not track emissions from individual U.S. forest owners nor does it differentiate greenhouse gas flux between public and private forests. While useful for monitoring general trends occurring in the overall sector itself, data of much finer resolution are necessary to "support a range of future climate change policies," which is the ultimate objective of the EPA's proposed rule.
- 2. Methods to estimate entity-level emissions yield uncertain results. In its justification for the exclusion of biological sources, the EPA states that entity-level reporting would yield uncertain results, and would require individual forest landowners to report land use change along with estimates of emissions associated withthe change. However, the greenhouse gas flux information reported by the Inventory yields correspondingly uncertain results when used at all but the coarsest spatial scales. The data on forest emissions and sinks as reported in the Inventory are based on stock change estimates using Forest Inventory and Analysis (FIA) information. Look-up tables based on FIA data are used to quantify carbon stocks by age in an "average" forest for a given region as stratified by forest type. Allometric equations are then used to indirectly estimate additional forest carbon pools. Because the FIA extrapolates forest-stocking data from individual sample plots scattered over the landscape, the statistical robustness of FIA data diminishes at finer spatial scales as sample sizes decrease. The EPA acknowledges the shortcomings of using the FIA data in their justification for the exclusion of biological sources, admitting that these data are only appropriate when used at the county scale or greater. Furthermore, because the Inventory does not disaggregate data from public and private lands, it is not possible to discern land use changes by ownership types. However, even if these data were disaggregated, forest emission and sink data for private lands would be robust only at the coarsest spatial scales due to the FIA's inherently poor sampling coverage of private lands. As a result, even if ownership were differentiated, the data provided by the Inventory would not be sufficient to isolate and address local trends in forest conversion and degradation.
- 3. No direct emission measurement methods are available, except those that are prohibitively expensive and require sophisticated equipment, making entity-level monitoring prohibitively costly. While the EPA is correct in noting that the direct measurement of carbon flux requires chamber-based instrumentation that is costly and time consuming to install and maintain, there are a variety of different points at which forest carbon flux data can be gathered. The monitoring of changes in stocking volume over time would allow the EPA to track carbon

flux at a much more efficient data collection point, and dispense with the need for expensive, highly-technical monitoring equipment. Because stocking information is critical to timber management, much of this information is already being gathered by private forestland owners and reported for land use and tax purposes.

- 4. The characterization of changes in carbon stocks would require site-specific information that is typically not available at the scale of individual reporters. The EPA submits that the monitoring of greenhouse gas flux at the entity level would require individuals to report land use change along with associated emissions, but cites this information as generally not available at the scale of individual reporters. However, for forest landowners managing their lands for timber production, this information likely already exists in the form of the stocking and harvest data required by state forest practice acts. These data are compiled by large forest landowners in the form of commercial timber cruises and timber harvest plans, or as tax data submitted for harvest or severance taxes. For forest landowners seeking to convert and develop their lands, high-resolution forest conversion data could be obtained via the permits filed with local planning commissions. By simply extending reporting requirements to utilize this existing data source, the EPA could obtain high-resolution, entity-level information on forest stocking. These data easily could be used to track forest stock change, which would enable the EPA to monitor greenhouse gas flux on private forestlands.
- 5. Forest emissions sources are characterized by a large number of small emitters. In its justification for the exclusion of biological sources, the EPA states that the ownership of private forestlands encompasses approximately 10.3 million U.S. landowners. Noting its objective to balance the rule of coverage to maximize the amount of emissions reported while excluding small emitters, the EPA observes that the exclusion of forest reporting requirements would be justified by virtue of the sheer magnitude of landowners who would be affected by reporting requirements. 10 However, this argument fails to acknowledge that relatively few landowners hold the majority of forestland area. In fact, of the more than 10 million private forest landowners in the U.S., less than 0.3% own 40% of the private forestland base in the U.S. By focusing reporting requirements on the small percentage of forest landowners who own the largest parcels, EPA could maximize the amount of highresolution data obtained on forests while minimizing the administrative burden of reporting requirements. In addition, programs could be established in which states collect data on all or a significant portion of small landowner holdings, relieving the cost burden from these owners. [Footnote: 11 See, for example, the University of Washington forest parcel database: http://www.nwenvironmentalforum.org/documents/RetentionReport/AppendixEForestlandD atabase.pdf]
- 6. Domestic forests currently act as a greenhouse gas sink; the total carbon fluxes from U.S. forestlands and other land uses and land-use changes cumulatively resulted in a net carbon sequestration of 883.7 MMT CO₂e in 2006. While domestic forests currently provide a sink for greenhouse gas emissions, the existence of this sink is in jeopardy. In the U.S., privately-held forests compose nearly two-thirds of all domestic forests and are an integral component of the greenhouse gas sink provided by U.S. forests. However, 1.5-million acres of private forestland are lost annually through conversion, and with them, so too is the carbon storage and sequestration afforded by these lands. While the information provided by the Inventory can track overall forest conversion trends in the forest sector, the resolution of the data is not sufficient to isolate and address specific sources of forest loss. However, if entity-level reporting information, much of which already exists in the form of timber harvest plans or

harvest tax data, were collected from forest landowners, the EPA would be provided with data of sufficient quality to support a range of future climate change policies—which is an ultimate objective of this proposed rule. Domestic forests will continue to play a central role in the fight against climate change. However, whether or not this role will be a help or a hindrance remains up to us. To ensure the climate value of our forest assets is maximized, future policy decisions must have access to data at a scale sufficient to address the problem at hand. While the consequences of forest management are national in scale, the decisions to conserve or convert forestland are made at the scale of the individual entity. Accordingly, devising policy solutions will require understanding and tracking the problem at this scale.

Response: At this time EPA is not including the forest sector in the final rule. However, we appreciate the information provided by the commenter. As we continue to evaluate the information needed for future climate change policies and additional source categories, we will consider the information provided by this and other commenters regarding emissions and sequestration related to forest land uses.

Commenter Name: Gabe Petlin

Commenter Affiliation: Renewable Energy Marketers Association (REMA)

Document Control Number: EPA-HQ-OAR-2008-0508-0795.1

Comment Excerpt Number: 1

Comment: REMA is interested in addressing how the proposed rule will treat Renewable Energy Credits (RECs). To that end, REMA and all its member organizations encourage the EPA to recognize the importance of greenhouse gas reduction benefits associated with purchases of renewable energy credits. This is contrary to what is currently proposed by EPA and we urge you to reconsider this position. REMA and its allies believe that recognition of these credits is possible via the structure of the greenhouse gas emissions inventory as well as the allowance allocation regulations. For example, the Regional Greenhouse Gas Initiative established a Voluntary Renewable Energy Set-Aside where CO₂ emissions reductions are recognized in lieu of retired allowances. In this framework, entities partake in voluntary purchases of renewable energy and renewable energy credits. We hope that EPA would deem that a facility's purchase of renewable energy is synonymous with an attempt to curb emissions.

Response: Please see the Section III.B. of the preamble for our response to comments on reporting of electricity purchases and other indirect emissions.

Commenter Name: Gary F. Lindgren

Commenter Affiliation: Calumet Specialty Products Partner, L.P. **Document Control Number:** EPA-HQ-OAR-2008-0508-0626.1

Comment Excerpt Number: 10

Comment: EPA needs to eliminate insignificant sources (e.g., wastewater treatment)

Response: See Sections II.D and II.K of the preamble for the responses on selection of source categories to report and de minimis reporting. At this time EPA is not going final with the wastewater treatment subpart. As we consider next steps, we will be reviewing the public

comments and other relevant information. Thus, we are not responding to comments on this subpart at this time.

Commenter Name: Melinda L. Tomaino

Commenter Affiliation: Associated General Contractors of America (AGC)

Document Control Number: EPA-HQ-OAR-2008-0508-0628.1

Comment Excerpt Number: 9

Comment: According the proposed rule, if the facility does not contain any of the source categories that require reporting, then it will need to determine and report if it emits 25,000 metric tpy CO₂e or more from stationary combustion sources in any calendar year beginning in 2010. These sources typically include boilers, process heaters, engines in stationary equipment, etc. If the maximum rated heat input capacity for all stationary fuel combustion equipment is less than 30 million British thermal units (mmBtu) per hour, then EPA presumes the facility emits less than 25,000 metric tpy CO₂e and the facility does not have to calculate or report emissions. EPA estimates that individual home owners would not be required to report under the proposal. The average annual household emissions in the U.S. are about 11.3 metric tpy CO₂e. EPA also estimates that between 75 to 80 percent of commercial buildings would not be required to report as their equipment typically have a maximum rated heat input capacity of less than 10 mmBtu. Based on EPA's own estimates that very few of these buildings will fall within the threshold for reporting, AGC suggests that EPA exempt residential and non-residential commercial buildings (including houses of worship, schools, hospitals, shopping malls, and office buildings) from the reporting requirements. This exemption would protect homeowners and thousands of small business operators, non-profit organizations, and public service providers from the cost of determining their applicability in the program and maintaining compliance under the threat of penalties that could involve jail time for human errors made in the reporting. AGC urges EPA to consider the many initiatives underway at the federal, state, and local levels that encourage (and at times mandate) energy efficient and "green" buildings—initiatives that are reducing the GHG emissions associated with residential and non-residential buildings. In fact, the green building market continues to grow, even in this current economic downturn.

Response: Consistent with the Appropriations Act, the rule requires reporting of GHG emissions from facilities above the threshold across economic sectors. EPA has not included an exclusion for commercial buildings in the final rule for two reasons. First, the 25,000 metric tons of CO₂e per year threshold is high enough to exclude most small commercial and institutional facilities. The general stationary fuel combustion source category does not include residential combustion. For more information please see preamble III. C and the response to comments document for general stationary fuel combustion. Furthermore, as the commenter correctly points out, EPA estimates that between 75 and 80 percent of commercial buildings will not be required to report. Second, collecting data on facilities that have relatively large stationary combustion units is consistent with the intent of the Appropriations Act. Therefore, some commercial and nonresidential businesses and institutions will be required to report. However, to reduce the burned on smaller combustion sources, we have provided an exclusion for facilities with a combined rated heat input of less than 30 million Btu, which eliminates the need to perform GHG emissions calculations for many smaller combustion sources. In addition, EPA will provide additional applicability determination guidance with simple cutoffs depending on the type of fuel combusted. Therefore, applicability determination for commercial and institutional buildings is not complex or burdensome. For more information on applicability determination, see the

preamble and the comment response volume on subpart A and outreach materials posted on the Web site. For discussion of the economic impacts of this rule on small businesses, see the preamble sections on economic impacts and Regulatory Flexibility Analysis.

Commenter Name: William C. Herz

Commenter Affiliation: The Fertilizer Institute (TFI)

Document Control Number: EPA-HQ-OAR-2008-0508-0952.1

Comment Excerpt Number: 51

Comment: Under the NPRM, commercial and large residential buildings would have to evaluate whether they emit the threshold of 25,000 metric tons of CO₂e. These buildings could have furnaces or boilers that would fall within the threshold and thus would be required to report. This imposes an unnecessary burden on relatively minor sources of GHGs and can increase housing costs and compliance costs to commercial facilities housing multiple small businesses. EPA, in accordance with its express desire to avoid increasing compliance costs to small businesses, should exempt all commercial and residential facilities from any GHG reporting requirements.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0628.1, excerpt 9.

Commenter Name: See Table 8

Commenter Affiliation:

Document Control Number: EPA-HQ-OAR-2008-0508-0679.1

Comment Excerpt Number: 11

Comment: EPA addresses in the preamble the issue of inclusion, or exclusion, of reporting indirect emissions (Scope 2 and 3). EPA requests comments on reporting the quantity of electricity purchased: "We are also taking comment on, but not proposing at this time, requiring facilities and supply operations affected by the proposed rule to also report the quantity of electricity purchased". (74 FR 68, page 16473) API comments API supports EPA's decision to not include reporting of indirect emissions, or electricity consumption, into this reporting rule. Indirect emissions were originally included in voluntary entity reports in order to demonstrate the range of an entity's GHG impacts, from both direct and indirect GHG emissions. However, for the MRR, information about indirect emissions, or even electricity consumption data, is not needed for developing future regulatory strategies to address GHG emissions.

Response: Please see the Section III.B. of the preamble for our response to comments on reporting of electricity purchases and other indirect emissions.

Commenter Name: Rich Raiders **Commenter Affiliation:** Arkema Inc.

Document Control Number: EPA-HQ-OAR-2008-0508-0511.1

Comment Excerpt Number: 73

Comment: EPA did not include fertilizer manufacturing and use, a known source of GHGs, in the proposed Part 98, and should propose a fertilizer section to Part 98 as part of finalizing this regulation. Fertilizer manufacturing not only uses natural gas as a significant feedstock, but

fertilizer manufacture and use emits large amounts of several GHGs that should be included in EPA's inventory process.

Response: For the response on reporting of synthetic fertilizer production and nitrogen content, see Volume 13 (Subpart A: Content of the Annual Report, the Abbreviated Emission Report, Recordkeeping, and Monitoring Plan) of this document. If fertilizer manufacturing facilities contain other source categories covered by the rule (e.g., nitric acid or ammonia production) or general stationary fuel combustion sources above the threshold, then they have to report emissions for combustion and other sources for which there are methods in the rule. For the rationale for not requiring farms and other agricultural and land use sources to report the quantities of fertilizers they use, see section IV.B of the proposal preamble (74 FR 16467, April 10, 2009).

Commenter Name: Jennifer Reed-Harry

Commenter Affiliation: PennAg Industries Association

Document Control Number: EPA-HQ-OAR-2008-0508-0948.1

Comment Excerpt Number: 11

Comment: We question how proactive industries, that are currently capturing or sequestrating GHG, will be compensated in the annual reporting for good stewardship measures already implemented.

Response: For the response on sequestration of carbon through agricultural crops and other land uses, see the preamble section containing responses on source categories to report, and EPA-HQ-OAR-2008-0508-0525.1, excerpt 25.

Commenter Name: J. Jared Snyder

Commenter Affiliation: New York State Department of Environmental Conservation

Document Control Number: EPA-HQ-OAR-2008-0508-1184

Comment Excerpt Number: 9

Comment: Agriculture and forestry activities are widely recognized as potential carbon sinks and GHG mitigation options. However, land-use and land-use change associated with these sectors can also, be GHG emission sources. The Department recommends that EPA consider the Section 1605(b) federal voluntary reporting program of the Department of Energy (DOE), Energy Information Administration (EM) to thoroughly evaluate agriculture and forestry sector data and land-use and land-use change reporting, such as emissions associated with harvesting and deforestation.

Response: At this time EPA is only requiring reporting from manure management systems. We are not exempting or otherwise commenting on other agricultural and land use emissions at this time. However, we will be considering comments on this subject as we continue to assess possible future Climate Change policies. For the response on reporting emissions and sequestration from land-use and land-use change, see the preamble section on source categories to report. For the response on emissions from agriculture, see comment EPA-HQ-OAR-2008-0508-0525.1, excerpt 25.

Commenter Name: James Sims

Commenter Affiliation: Western Business Roundtable

Document Control Number: EPA-HQ-OAR-2008-0508-1038.1

Comment Excerpt Number: 8

Comment: The Roundtable strongly urges EPA to concentrate solely on direct emissions in this rule. Collecting information other than that related to direct emissions will lead to confusion and/or attempts to wrongly aggregate indirect emissions with those emissions directly resulting from covered entities' operations. It is important to note that, in most cases, what is an "indirect" emission in one context is a "direct emission" covered elsewhere. Thus, including indirect emissions would certainly result in double-counting. Just a few examples: 1. Indirect emissions from electricity purchases are a consequence of direct emissions from electricity generators and those associated emissions would already be reported under this proposed rule as direct emissions from electricity generating facilities. 2. Over 93 percent of coal produced in the United States is combusted to generate electricity. Most of the remainder is sold for industrial and manufacturing purposes. CO₂ emissions produced by the combustion of coal in electric generating units will be reported to EPA in accordance with other provisions of this proposal. Likewise, most industrial users of coal will already report under the rule.

Response: For For the response reporting of upstream and downstream emissions, See the response to EPA-HQ-OAR-2008-0508-0979.1, excerpt 3. Please see the Section III.B. of the preamble for our response to comments on reporting of electricity purchases and other indirect emissions.

Regarding the comment on coal, at this time EPA is not going final with the coal suppliers' subpart. As we consider next steps, we will be reviewing the public comments and other relevant information. Thus, we are not responding to comments on this subpart at this time.

Commenter Name: Andrew Ginsburg

Commenter Affiliation: Oregon Department of Environmental Quality

Document Control Number: EPA-HQ-OAR-2008-0508-1463

Comment Excerpt Number: 6

Comment: We agree with the WCI that the rules could be tailored so that they provide simplified quantification methods for certain sources such as hospitals and schools, or exempt these sources altogether.

Response: The rule provides simplified quantification methods for stationary combustion sources but not at the aggregated facility level in the way proposed by WCI. For the overall response on unit and process level reporting, see the response to comment EPA-HQ-OAR-2008-0508-0532.1, excerpt 11. See the preamble section and comment response documents for subpart C (General Stationary Fuel Combustion Sources) for a discussion of changes to the rule that allow more facilities to use the simpler Tier 1 and Tier 2 calculation methods. In addition, EPA is developing applicability determination guidance and tools to help facilities with combustion sources determine whether they are required to report. EPA is also developing guidance materials and training to help reporters understand the reporting requirements for combustion sources.

Commenter Name: See Table 11

Commenter Affiliation:

Document Control Number: EPA-HQ-OAR-2008-0508-0635

Comment Excerpt Number: 94

Comment: We agree with EPA that "agricultural soil management is a significant source of N₂O" and support EPA's efforts to begin to develop information on this source. Land use decisions and agricultural practices play important roles in both climate adaptation and mitigation.355 EPA's decision to require reporting on synthetic fertilizer production and nitrogen content – a requirement that appears not to sweep in any sources not otherwise covered by this rule – is a useful first step towards better accounting for the role of farming in the climate system. We support this modest initial effort and look forward to further strides in this area. Given that the amount of fertilizer imported into the US has been rapidly increasing, we also recommend that nitrogen fertilizer importers be required to report the amount of nitrogen in fertilizer coming into the United States. [FOOTNOTE: See, e.g, http://www.ers.usda.gov/amberwaves/February04/Findings/USIncreasinglyImports.htm.]

Response: For the response to the comment on fertilizer reporting, see the response to comment EPA-HQ-OAR-2008-0508-0511.1, excerpt 73.

Commenter Name: See Table 9

Commenter Affiliation:

Document Control Number: EPA-HQ-OAR-2008-0508-1021.1

Comment Excerpt Number: 16

Comment: EEI generally supports EPA's preferred option that entities not be required to report indirect emissions, but believes that EPA should allow entities to report indirect emissions associated with electricity purchases on a voluntary basis. If the purpose of the regulation is to develop a comprehensive picture of U.S. GHG emissions, the reports should focus on direct emissions, for the following reasons: 1. All relevant "indirect emissions" will already be reported under the proposed rule as "direct emissions." 2. If "indirect emissions" reporting were mandated, even if only for purchased electricity, double reporting would occur. 3. Because indirect emissions will have to be an estimated amount, based on assumptions regarding the fuel mix providing the electricity, there will be no way to cross-verify indirect emissions with direct emissions. Thus, the inclusion of indirect emissions in the reports will not provide any additional perspective on the quality of the estimates of direct emissions. Electricity distribution networks often blend electricity from multiple sources (e.g., nuclear-generated, wind-generated, and coalgenerated electricity), and therefore, indirect emissions will not be easily traceable to the source of the direct emissions. EEI believes that management of indirect emissions will be an important component of a future GHG emissions reduction program. In fact, many EEI member companies purchase large volumes of emissions-free generation from third parties, and market this power either on a blended basis, or in some cases as a separate category of "green power." In addition, many EEI member companies offer programs to their customers to reduce peak demand or enduse consumption through the application of energy efficiency and energy management technologies and measures. These programs reduce the direct emissions of GHGs by reducing the demand for electricity generated from fossil fuels. While these reductions would be reflected in the direct emissions reported by the electricity generators, the emissions reductions due to less

demand would be caused by actions taken by an appliance manufacturer, the local electricity distribution company (LDC), the customer or joint action. In a future mandatory GHG emissions reduction program, such as cap-and-trade, many parties, including manufacturers, LDCs and customers, may want to be in a position to earn credits for these reductions. These credits would be based upon reductions in indirect emissions. Thus, there would need to be a methodology developed in the future to estimate indirect emissions and allow credits for reductions in GHG due to demand-side management actions.

Response: At this time, we are not providing for voluntary reporting of indirect emissions of the rule. Such voluntary reporting would add complexity to the rule and would not be sufficiently useful for national program development, because the data would be submitted by only those facilities/companies that elect to submit it, and would therefore not provide comprehensive national information. Different reporters would also likely calculate voluntary GHG emissions data using different methods so the accuracy and comparability of data from different sources would be lower than the mandatory reports. For the response on reporting of electricity purchases and indirect emissions, see Section III.B. of the preamble.

Commenter Name: Rhea Hale

Commenter Affiliation: American Forest & Paper Association (AF&PA)

Document Control Number: EPA-HQ-OAR-2008-0508-0909.1

Comment Excerpt Number: 29

Comment: AF&PA supports EPA's recognition that forests in the U.S. are a net carbon sink for greenhouse gases, rather than a net source. Accordingly, emissions related to managed forests and land management should not be reported, nor included under any regulatory system that might be adopted. Instead, forestry practices should be eligible to participate voluntarily in offset programs on a project basis. All existing GHG international protocols treat forestry in this manner.

Response: For the response on forest land use emissions and sequestration, see the preamble section containing responses on source categories to report.

Commenter Name: Karen St. John

Commenter Affiliation: BP America Inc. (BP)

Document Control Number: EPA-HQ-OAR-2008-0508-0631.1

Comment Excerpt Number: 69

Comment: BP believes that EPA should expand the coverage of its rule to include all "biofuel" production facilities that combust fossil fuel-based fuels so long as they meet the reporting threshold, and not limit the rule to "ethanol" production facilities only.

Response: All facilities, regardless of the sector, must report direct emissions from stationary combustion sources if they have stationary combustion source emissions above the threshold in the rule or contain other source categories covered by the rule. At this time EPA is not going final with the ethanol production subpart. As we consider next steps, we will be reviewing the public comments and other relevant information. Thus, we are not responding to comments on this subpart at this time.

Commenter Name: James Salo **Commenter Affiliation:** Trucost Inc.

Document Control Number: EPA-HQ-OAR-2008-0508-0984.1

Comment Excerpt Number: 2

Comment: We believe that further emission information is required and that there should be a strong mechanism by which the EPA encourages the inclusion of additional emission sources. In order to have a comprehensive view of the greenhouse gas emissions associated with a company's activities there must be standardized data available in addition to direct emissions for all facilities (emissions from sources that are owned or controlled by the company – Scope 1 according to the industry standard Greenhouse Gas Protocol). The dataset should include emissions associated with electricity use required by its operations (Scope 2) and other indirect emissions such as those associated with the company's supply chain (Scope 3). Indirect greenhouse gas emissions resulting from the supply chains represent almost 50% of the total greenhouse gas emissions emitted by S&P 500 companies. [Footnote: http://trucost.com/pressreleases/S&P%20Carbon%20Risk.html] Therefore, adequate information about these emissions is essential in order to gather a comprehensive view of a company's greenhouse gas emissions. However, there is currently very little information available from companies to assess the risks and opportunities related to their greenhouse gas emissions. A report that Trucost released on June 2nd, 2009, found that this is true even for the largest public US companies – where only 34% of the S&P 500 adequately disclose their direct greenhouse gas emissions. [Footnote: http://trucost.com/pressreleases/S&P%20Carbon%20Risk.html] There is even less information available on a company's emissions from electricity use or supply chain.

Response: Please see the Section III.B. of the preamble for our response to comments on reporting of electricity purchases and other indirect emissions.

Commenter Name: William C. Herz

Commenter Affiliation: The Fertilizer Institute (TFI)

Document Control Number: EPA-HQ-OAR-2008-0508-0952.1

Comment Excerpt Number: 1

Comment: In the NPRM, EPA requests information on the application of GHG reporting requirements to fertilizer wholesalers, distributors and importers. 74 Fed. Reg. at 16467. The scope of the NPRM already adequately accounts for GHG emissions from the fertilizer industry. By expanding reporting requirements to wholesalers and distributors, the rule would unnecessarily duplicate data reported from upstream fertilizer producers. Such reporting requirements skew data with duplicative reporting and unnecessarily burden small businesses which simply sell fertilizers for which emissions data will have already been reported from upstream sources. As such, TFI opposes any attempt by EPA to expand reporting requirements to fertilizer wholesalers and distributors.

Response: For the response to the comment on fertilizer reporting, see the response to comment EPA-HQ-OAR-2008-0508-0511.1, excerpt 73.

Commenter Name: Jennifer Reed-Harry

Commenter Affiliation: PennAg Industries Association

Document Control Number: EPA-HQ-OAR-2008-0508-0948.1

Comment Excerpt Number: 2

Comment: The scope of the NPRM already adequately accounts for GHG emissions from the fertilizer industry. By expanding reporting requirements to wholesalers and distributors the rule would unnecessarily duplicate data reported from upstream fertilizer producers. Such reporting requirements skew data with duplicative reporting and unnecessarily burden small businesses which simply sell fertilizers for which emissions data will have already been reported from upstream sources. We oppose any attempt by EPA to expand reporting requirements to fertilizer wholesalers and distributors.

Response: For the response to the comment on fertilizer reporting, see the response to comment EPA-HQ-OAR-2008-0508-0511.1, excerpt 73.

Commenter Name: Juanita M. Bursley

Commenter Affiliation: GrafTech International Holdings Inc. Company (GrafTech)

Document Control Number: EPA-HQ-OAR-2008-0508-0686.1

Comment Excerpt Number: 4

Comment: GrafTech agrees with EPA that facilities with listed GHG emitting sources that exceed the reporting threshold need only to report direct emissions and that these individual facilities should not be required to also report on electricity used. By excluding indirect emissions from the source's calculations, the rule discourages double-counting of emissions among upstream and downstream sources and will help EPA achieve a more accurate aggregated total of such emissions.

Response: Please see the Section III.B. of the preamble for our response to comments on reporting of electricity purchases and other indirect emissions.

Commenter Name: Robert N. Steinwurtzel

Commenter Affiliation: Bingham McCutchen LLP on behalf of Association of Battery

Recyclers (ABR)

Document Control Number: EPA-HQ-OAR-2008-0508-0660.1

Comment Excerpt Number: 3

Comment: In performing the analysis to determine which source categories are covered by the Mandatory Reporting of Greenhouse Gases Proposed Rule (Proposed Rule) and the thresholds for mandatory reporting that will apply to those source categories, it is important that EPA establish standard criteria and apply it consistently. EPA describes its analysis and establishes such criteria on page 16,465 of the Proposed Rule. 74 Fed. Reg. at 16,465. EPA states that source categories that would submit reports under the Proposed Rule were selected after considering applicable language of the Appropriations Act and EPA's experience in quantifying GHG emissions for the EPA GHG Inventory. Id. Consistent with existing international, national and regional GHG reporting programs, EPA chose to include only anthropogenic sources in the Proposed Rule and considered all of the source categories in the EPA GHG Inventory, plus one

additional source category from the recently completed 2006 IPPC Guidelines for National Greenhouse Gas Inventories, as being relevant to the U.S. Id. According to EPA, this list of relevant GHG emitters was then systematically reviewed against the following criteria to develop the list of sources to include in the Proposed Rule: (1) Include source categories that emit the most significant amount of GHG emissions, while also minimizing the number of reporters, and (2) Include source categories that can be measured with an appropriate level of accuracy. EPA further states that it accomplished the first criterion by setting reporting thresholds that target large emitters. Id. In discussing how it accomplished the second criterion, EPA admits that in instances where EPA has knowledge and understanding of source-specific factors (e.g., from prior rulemakings), these sources are included. Id. However, EPA excluded other source categories from facility-level reporting under the Proposed Rule because knowledge and available emissions information is lacking, stating that in these cases other means of obtaining GHG emissions from these sources could be relied on, such as national-level modeling. Id.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0490.1, excerpt 8.

Commenter Name: Bryan Brendle

Commenter Affiliation: National Association of Manufacturers (NAM)

Document Control Number: EPA-HQ-OAR-2008-0508-1527

Comment Excerpt Number: 3

Comment: A comprehensive, federal GHG registry must ensure that emissions created while manufacturing energy-efficient products are offset with the long-term energy savings of such products. The EPA's Climate Leaders Program illustrates how existing public-private partnerships can serve as a model for a successful environmental program. Climate Partners has gathered a wealth of emissions data and best practices through partnerships with more than 250 companies that should be used to implement a comprehensive federal GHG registry. This program, according to 2007 data, represents a cross-section of the U.S. economy, demonstrating how an economy-wide program may be implemented. It also represents 8 percent of the country's total GHG emissions.

Response: While we agree that the manufacture of energy-efficient products is an important industry, we also believe that it is important to collect data across the economy in order to develop a comprehensive set of data to evaluate CAA options for addressing GHG emissions and climate change. Thus, any manufacturing facility that exceeds the threshold for stationary fuel combustion must report under this rule, regardless of whether its products help address the challenge of climate change and improve energy efficiency. See the preamble for a general discussion of the relationship of this reporting rule to other programs.

Commenter Name: James M. Bushee

Commenter Affiliation: PGC Electricity Committee

Document Control Number: EPA-HQ-OAR-2008-0508-0683.1

Comment Excerpt Number: 2

Comment: Inasmuch as this program might ultimately be tied to a regulatory regime to control and limit GHG emissions (e.g., cap-and¬trade), reporting indirect emissions and related information would also raise the risk of unjustified double-counting and over-regulation of

emissions. Requiring electricity customers to account for the emissions associated with upstream electricity generation would unfairly penalize the downstream user for activities beyond their control, such as whether the generator switches fuel sources, adds control equipment or adopts other emissions-related measures.

Response: Please see the Section III.B. of the preamble for our response to comments on reporting of electricity purchases and other indirect emissions.

Commenter Name: Lee Fuller

Commenter Affiliation: Independent Petroleum Association of America (IPAA)

Document Control Number: EPA-HQ-OAR-2008-0508-0431.1

Comment Excerpt Number: 4

Comment: We believe that including onshore petroleum and natural gas production facilities in the reporting requirements runs counter to EPA's focus in this proposal. EPA structured the proposal by selecting its 25,000 tons/year facility reporting threshold in part based on a cost effectiveness test to capture most of the GHG emissions while limiting excessive costs. Despite this effort, under the current proposal 43 percent of the first year capital costs to comply with the rule will be borne by the petroleum and natural gas industry to report an estimated 3 percent of the nation's GHG emissions. Expanding the reporting requirements to onshore facilities will dramatically increase these costs unnecessarily. American petroleum and natural gas production comes from approximately 933,000 wells – roughly 500,000 oil wells and 433,000 natural gas wells. These facilities are spread across 33 states. Offshore facilities would be within the scope of the reporting requirements. EPA estimates that 50 offshore facilities would be covered under the 25,000 tons/year threshold. If EPA were to expand the reporting requirements to onshore facilities, it is highly unlikely that any production well facility would meet the reporting threshold. For example, approximately 85 percent of oil wells and 74 percent of natural gas wells are marginal wells producing less than 15 barrels/day of oil and 90 mcf/day of natural gas, respectively. Most of these operations are owned by small businesses. None of them would exceed the reporting threshold individually. EPA largely seems to recognize this reality when it states: ...this segment is not proposed for inclusion primarily due to the unique difficulty in defining a 'facility' in this sector and correspondingly determining who would be responsible for reporting. EPA has requested comments on how to define a facility for onshore petroleum and natural gas production and whether to require reporting on a basin level. We believe that the appropriate facility definition tracks the nature of the operation – essentially a well pad which may contain one or several wells and the attendant separation and storage facilities. As we discussed above, these operations will fall well below the reporting threshold. To approach the reporting on a basin level would result in compelling this industry to use a reporting threshold far below the 25,000 tons/year threshold required for other industries. In essence, all production operations would have to determine emissions levels by whatever estimation or monitoring requirements would apply. This would impose dramatically different costs. To put all of this in some perspective, EPA's INVENTORY OF U.S. GREENHOUSE GAS EMISSIONS AND SINKS: 1990-2007 (Released on April 15, 2009) would suggest that the GHG emissions from natural gas systems and petroleum systems account for roughly 2.3 percent of U.S. GHG emissions. EPA suggests that about 27 percent of these emissions come from onshore petroleum and natural gas production operations – or roughly 0.6 percent of U.S. GHG emissions. There is no compelling rationale to justify imposing on this segment of American industry a far costlier reporting requirement, capturing hundreds of thousands of wells many owned by small

businesses, solely for the purpose of minimally improving the U.S. GHG emission inventory. Moreover, there are clearly emissions estimating tools at work that have been used and can be improved without imposing these new requirements. If better estimates are needed for this small portion of the GHG inventory, EPA's support documents present information that can draw a pathway. EPA operates the Natural Gas Star program. It cites information in supporting documents to the current proposal indicating that Natural Gas Star has identified and to some degree determined what emissions areas at production facilities generate the most emissions. Similarly, API is releasing a new version of its Compendium of Greenhouse Gas Emissions Estimation Methodologies for the Oil and Gas Industry. These tools can be used to create reasonable average emissions projections for production facilities that could be linked to production volumes. And, EPA could then improve its GHG estimates for onshore petroleum and natural gas production without imposing the costly reporting burdens that would result from inclusion of these operations in the reporting requirements.

Response: At this time EPA is not going final with the oil and natural gas systems subpart. As we consider next steps, we will be reviewing the public comments and other relevant information. Thus, we are not responding to comments on this subpart at this time.

Commenter Name: George Woods

Commenter Affiliation: E. Roberts Alley & Associates, Inc. **Document Control Number:** EPA-HQ-OAR-2008-0508-0269.1

Comment Excerpt Number: 2

Comment: In the preamble beginning on page 16569, in the discussion of Suppliers of Petroleum Products, only Refiners and Importers of petroleum products are included for reporting. Operators of Terminals or Pipelines, blenders of blendstocks and retail gas stations are being excluded. EPA believes that there is a lower risk of double counting of petroleum products by only including Refiners and Importers. Why is there such a counting inconsistency between GHG for Coal and Petroleum? Why is double counting not an issue for coal while it is an issue as far as petroleum products are concerned?

Response: Under the rule suppliers of petroleum products including refineries and importers and exporters of petroleum products are required to report the GHG emissions associated with complete combustion or oxidation of their products. EPA determined that requiring reporting by these upstream sources will capture all CO₂ emissions associated with petroleum products. At this time EPA is not going final with the coal suppliers subpart. As we consider next steps, we will be reviewing the public comments and other relevant information. Thus, we are not responding to comments on this subpart at this time. For the response on reporting by both upstream and downstream sources and potential double counting, see the preamble section containing responses on source categories to report.

Commenter Name: Janice Adair

Commenter Affiliation: Western Climate Initiative (WCI) **Document Control Number:** EPA-HQ-OAR-2008-0508-0443.1

Comment Excerpt Number: 2

Comment: WCI recommends the inclusion of important oil-and-gas sectors in the mandatory reporting rule, including onshore petroleum and natural gas production, natural gas distribution, pipeline segments, and crude oil transportation. WCI intends to include these in our reporting program, building upon analysis conducted for the ongoing Western Regional Air Partnership (WRAP) Oil & Gas Exploration & Production and Natural Gas Gathering & Processing GHG Accounting Protocol Project. U.S. EPA staff is involved as a member of the project Technical Working Group.

Response: At this time EPA is not going final with the oil and natural gas systems subpart. As we consider next steps, we will be reviewing the public comments and other relevant information. Thus, we are not responding to comments on this subpart at this time.

Commenter Name: Stewart T. Leeth

Commenter Affiliation: Smithfield Foods, Inc.

Document Control Number: EPA-HQ-OAR-2008-0508-0553.1

Comment Excerpt Number: 9

Comment: In the Proposed Rule, EPA states that "POTWs are not included in this proposal because, as described in the Wastewater Treatment TSD (EPA-HQ-OAR-2008-0508-035), emissions from POTWs do not exceed the threshold considered under this rule." (74 Fed. Reg. at 16,560). However, EPA's Inventory of Greenhouse Gas Emissions depicts POTWs as a larger contributor of CO₂e than industrial wastewater treatment. (EPA, DRAFT Inventory of US Greenhouse Gas Emissions and Sinks: 1990-2007, Ch. 8, Table 8-6 (April 15, 2009)). Food processing is an even smaller subset of the industrial category. As AMI observes in its comments, 2007 CO₂e emissions in the food industry amounts to 0.179% of net US total GHG emissions. Based on EPA's own reasoning for excluding POTWs from the Proposed Rule, there is absolutely no basis to include food processing.

Response: At this time EPA is not going final with the food processing and wastewater treatment subparts. As we consider next steps, we will be reviewing the public comments and other relevant information. Thus, we are not responding to comments on these subparts at this time. We also wish to clarify that the statement in the proposal preamble about POTWs refers to the fact that individual POTW facilities do not appear to exceed the facility-level reporting threshold of 25,000 metric tons CO₂e per year selected for this rule or the other thresholds considered. A goal of this rule is to consistently collect emissions data from facilities above the selected threshold across economic sectors. See the preamble for responses to comments on the thresholds and source categories to report.

Commenter Name: W. Hugh O'Riordan **Commenter Affiliation:** Givens Pursley LLP

Document Control Number: EPA-HQ-OAR-2008-0508-0413.1

Comment Excerpt Number: 14

Comment: ETF members are concerned with potential negative environmental and safety impacts of including Sulfur hexafluoride gas (SF_6) under the mandatory reporting requirement as a GHG. EPA is creating a false impression by exaggerating the amount of SF_6 gas which is emitted into the atmosphere from electrical equipment. In addition to this rulemaking, EPA's

regulation can easily lead to more regulations of SF₆; gas under "cap and trade" or carbon tax laws. This is unfair as SF₆ leak emission rates are very very low. SF₆ has been used in the environment for nearly 50 years. SF₆ is used in high-voltage substation equipment such as high voltage circuit breakers and gas insulated substations (GIS). A large percentage of circuit breakers are used in power systems throughout the western states. Two benefits of SF₆ not discussed by EPA as applied to high voltage equipment are: First, SF₆ equipment requires less maintenance than oil breakers and thus provides significantly more reliable electric service, which is required by FERC. Second, SF₆ equipment requires smaller land areas than oil-filled equipment, and third, the replacement of oil filled equipment reduces the risk of spillage. These are significant reliability and environmental benefits. ETF member utilities are committed to further reducing SF₆ "leakage" or emissions and are currently working with EPA in tracking all SF₆ emissions. Since its introduction only a miniscule amount of the gas has been introduced into the environment, 0.000'000'000'003 parts by volume. SF₆ does not contain chlorine and does not affect the ozone layer. SF₆ does have reflective qualities that contribute to the overall green house affect. The effect has been estimated in the .01% range compared to CO₂ which is estimated to be in the 60% range of comparable concentration of "man made" green house effect. Since 1990 we have seen a marked drop in SF₆ levels in the atmosphere estimated at nearly 47%. EPA's "2009 U.S. Greenhouse Gas Inventory Report" establishes a long term decline in SF₆ gas emissions even though use of SF₆ gas has increased. From 1990 to 2007 "emissions and sinks" of SF₆ gas in teragrams of carbon dioxide equivalents (Tg CO₂e) from electrical transmission and distribution decreased from 26.8 CO₂e in 1994 to 12.7 CO₂e in 2007. This is over 50% reduction at a time of increased SF₆ gas use. Further reductions are occurring due to electric utility practices. Moreover, EPA notes that in 2009 the total U.S. greenhouse gas emission was 7150.1 Tg CO₂e and that overall U.S. emissions of GHG from 1990 to 2009 increased 17%. Given the dramatic reduction in SF₆ gas emissions at a time of total GHG CO₂e increases, there is no rational basis for EPA to impose mandatory recordkeeping on SF₆ in electric utilities. SF₆ is a man made gas. It has been used primarily for safety purposes as an electrical insulator and as an arc extinguishing agent. It may also be used as a cooling medium in switchgear and medium voltage applications. All of these applications are considered closed systems which historically have been verified as extremely low, "less than 1%" loss of emissions. These systems are actively and automatically monitored by utilities with either low or loss of pressure alarms. Any small leaks are responded to promptly and repaired by highly trained technicians. The proposed mandatory reporting and recordkeeping rule for SF₆ gas is unnecessary and imposes additional paperwork on electric utilities with no environmental benefit. SF₆ is such a minor and declining contributor to the overall "greenhouse" emissions that utilities need specialized equipment to detect it in the environment. For example, some ETF members use the state of the art FUR camera to locate and repair leaks. The amount of time that will be invested in complying with GHG Mandatory Reporting, additional monitoring, recordkeeping and enforcement requirements for SF₆ gas under the Clean Air Act is unjustified since SF₆ gas has such a small "if any" measurable footprint. The logical tact would be to encourage new technologies, new best management practices, and develop a replacement for SF₆ gas. Currently, alternatives to SF₆ gas such as vacuum or oil filled equipment do not provide the high level of efficiency and reliability increasingly needed to meet FERC/NERC/WECC Reliability Standards and Requirements. EPA's Mandatory Reporting Rule will impose costs and act as a disincentive to reduced SF_6 gas emissions without developing any alternative of its use.

Response: At this time EPA is not going final with the SF_6 from electrical equipment subpart. As we consider next steps, we will be reviewing the public comments and other relevant information. Thus, we are not responding to comments on this subpart at this time.

Commenter Name: Maureen Beatty

Commenter Affiliation: National Refrigerants, Inc. (NRI) **Document Control Number:** EPA-HQ-OAR-2008-0508-0434.1

Comment Excerpt Number: 22

Comment: Although destruction of HFCs is not currently widespread, it is possible that future regulatory actions at the international and domestic levels may encourage and/or regulate such practices. Given that possibility, NRI would support rules on reporting of destruction of HFC and fluorinated gases that meet the same principles of straightforward and clear application as discussed above with respect to production and importation of these gases. These would include clear definitions of gases covered, monitoring provisions based on and consistent with current practices for destruction of ODS, self-reporting with adequate data to allow periodic agency verification, and adequate protection of confidential commercial data.

Response: At this time EPA is not going final with the fluorinated GHG production subpart. As we consider next steps, we will be reviewing the public comments and other relevant information. Thus, we are not responding to comments on this subpart at this time.

Commenter Name: Edward S. Itta

Commenter Affiliation: Office of the Mayor, North Slope Borough (NSB)

Document Control Number: EPA-HQ-OAR-2008-0508-0852.1

Comment Excerpt Number: 4

Comment: EPA's proposed reporting rule does not appear to include a requirement for reporting indirect emissions related to oil and gas exploration and production. Generally, the various existing state and national GHG reporting registries and rules require reporting of indirect emissions from the oil and gas sector. The CCAR protocol, for example, includes indirect emissions reporting from imported steam as well as heating, cooling and electricity from cogeneration. TCR also requires reporting of indirect emissions. Additionally, New Mexico's GHG reporting rule requires that a source report include indirect emissions from "purchased electricity, heat or purchased steam that are used as part of the operation. The WRAP protocol development effort investigated indirect emissions and reported the following: "The requirement to report [indirect] emissions [associated with electricity, steam, heating or cooling] in part reflects the existence of standard, relatively accurate and straightforward methodologies for the estimation of these emissions ... While emissions from purchased electricity are generally not the dominant emissions source for the E&P [exploration and production] sector, they are nonetheless significant. Furthermore, although purchased steam is not a predominant source of emissions for the sector as a whole, it can be a major emissions source for some companies operating in heavy oil and oil sands fields." NSB strongly urges EPA to include indirect sources of electricity and heat in its mandatory reporting rule.

Response: Please see the Section III.B. of the preamble for our response to comments on reporting of electricity purchases and other indirect emissions. Also note that at this time EPA is not going final with the oil and natural gas systems subpart. As we consider next steps, we will be reviewing the public comments and other relevant information. Thus, we are not responding to comments on the oil and natural gas subpart at this time.

Commenter Name: Edward S. Itta

Commenter Affiliation: Office of the Mayor, North Slope Borough (NSB)

Document Control Number: EPA-HQ-OAR-2008-0508-0852.1

Comment Excerpt Number: 5

Comment: Another important source of GHG emissions on Alaska's North Slope is the fugitive emissions associated with the transport of marketable crude oil from the North Slope oil fields. The transport system in the NSB includes the Trans Alaska Pipeline System (TAPS), which consists of 800 miles of pipeline and includes numerous pump stations. Evaporation losses from storage, filling and unloading activities and fugitive equipment leaks are the primary sources of GHG emissions from this source. EPA is proposing to exclude reporting requirements for fugitive emissions from petroleum and natural gas pipeline segments due to: (1) the dispersed nature of emissions; (2) the difficulty in defining pipelines as a facility; and (3) because leaks are often quickly fixed, once detected. 74 FR 16532. Recognizing the complexity of defining a reporting entity for this sector, the NSB strongly urges EPA to commit to studying the matter further and commit to including this source in a future update to this reporting rule if reasonable reporting responsibilities can be established. The CCAR is developing a protocol for the natural gas transmissions and distribution sector and many of the attributes of that sector's definitions may be applicable to the petroleum transmission sector, as well. As with the natural gas transmission process, the transfer of custody from oil production operations to pipelines should constitute the boundary beyond which the transmission "facility" can be defined. Emissions released up until that transfer of custody should be included in basin-level reporting. Beyond the transfer of custody, the reporting entity should include the oil transmission and storage equipment and could include corporate-level reporting. EPA should conduct a thorough investigation of geographic boundaries and organizational boundaries (e.g., contractual relationships) in this industry sector to determine the best reporting entity. As an example, CCAR is considering two options for defining a facility for the natural gas transmission sector: (1) using the industry descriptions as portrayed in the North American Industrial Classification System (NAICS); and (2) using the regulatory definitions from the National Emission Standard for Emission of Hazardous Air Pollutants (NESHAPs) promulgated by EPA.26 EPA should consider including this sector in its reporting rules, even if it is not feasible to include such requirements in this version of the rule.

Response: At this time EPA is not going final with the oil and natural gas systems subpart. As we consider next steps, we will be reviewing the public comments and other relevant information. Thus, we are not responding to comments on this subpart at this time.

Commenter Name: Benjamin Brandes

Commenter Affiliation: National Mining Association (NMA) **Document Control Number:** EPA-HQ-OAR-2008-0508-0466.1

Comment Excerpt Number: 25

Comment: CO₂ emissions produced by the combustion of coal in electric generating units will be reported to EPA in accordance with other provisions of this proposal. Additionally, most remaining users of coal will similarly report under the rule. Therefore, virtually all of the actual GHG emissions associated with the U.S. coal production will be accurately monitored and

reported at the point of combustion. Aside from the apparent redundancy of requiring upstream reporting by coal suppliers of hypothetical GHG emissions from combustion, the usefulness of collecting and providing this information is diluted for several reasons. First, the proposed rule assumes 100 percent combustion by downstream consumers. Because no electric generating facility is 100 percent efficient, an inherent inaccuracy in the data will be created wherein the estimated emissions from the coal product will exceed the actual emissions at the point of combustion. The type of combustion unit(s) and method of operation at a particular generating facility will have a profound effect upon the nature and efficiency of combustion. Second, because virtually every electric generating facility will produce GHG emissions in excess of the proposed threshold, all of the actual emissions from coal supplied for that purpose will be captured by downstream reporting. Third, coal mining companies often supply coal to multiple customers, and electric generating facilities often receive coal from a variety of vendors. Coal from one supplier is often combined with coal from another supplier. This scenario makes it impossible to correlate the estimated emissions from the upstream coal supply with the actual emissions of that coal downstream at the point of combustion. The only rationale EPA provides for requiring upstream reporting seems to apply specifically to transportation fuel and industrial GHG suppliers. Certainly, upstream production reporting might prove useful in certain sectors to ensure that the majority of GHG emissions are accurately accounted for in the inventory. Requiring upstream reporting of imputed emissions from gasoline and other transportation fuels by suppliers, for instance, may be appropriate because those fuels are combusted in large measure by sources (such as automobiles) that are not subject to downstream reporting requirements. EPA identifies this very scenario in the preamble. 74 Fed. Reg. 16,466. EPA states in the preamble that it is requiring upstream reporting from suppliers of industrial gases and fossil fuels to avoid requiring reporting from "hundreds or thousands" of emission sources. EPA does not distinguish, however, between transportation fuel and entities that supply coal for electric generation and other purposes covered by the proposal. Coal is distinguishable from other fossil fuels. Nearly all of the coal produced in the U.S. will be combusted by large facilities to generate electricity, and therefore nearly all emissions from the entire product will be accurately monitored and reported downstream at the point of combustion. NMA believes that requiring coal producers to estimate the GHG emissions of their product downstream, while simultaneously requiring electric generating facilities to report the actual emissions at the point of combustion, will unavoidably result in unnecessary and superfluous double counting. NMA does not believe that EPA's justification for requiring upstream reporting from transportation fuel suppliers applies to suppliers of coal. In order to comply with the Congressional intent of the explanatory statement accompanying the appropriations act referenced above, EPA should provide source specific justification for requiring upstream reporting, and eliminate such requirements where no justification can be reasonably made. For these reasons, NMA believes that the Administrator should determine that requiring mandatory reporting of estimated CO₂ emissions from upstream coal suppliers is inappropriate. Requiring upstream reporting for coal suppliers will be burdensome on NMA members, and will produce confusing and nonrepresentative data, given that accurate reporting of actual emissions can be easily contributed by electric generating facilities and other sources covered under this proposal.

Response: At this time EPA is not going final with the suppliers of coal subpart. As we consider next steps, we will be reviewing the public comments and other relevant information. Thus, we are not responding to comments on this subpart at this time.

111

Commenter Name: J. Jared Snyder

Commenter Affiliation: New York State Department of Environmental Conservation

Document Control Number: EPA-HQ-OAR-2008-0508-1184

Comment Excerpt Number: 10

Comment: The Department recommends mandatory reporting of GHG emissions from the fermentation process. Significant carbon dioxide emissions from the fermentation process provide a pure stream of carbon dioxide that is typically vented to the atmosphere, but may be captured and sequestered or sold for other industrial applications. Accurate accounting of these emissions is necessary for determining net CO₂ emissions from ethanol production.

Response: At this time EPA is not going final with the ethanol production subpart. As we consider next steps, we will be reviewing the public comments and other relevant information. Thus, we are not responding to comments on this subpart at this time.

Commenter Name: Michael Garvin

Commenter Affiliation: Pharmaceutical Research and Manufacturers of America (PhRMA)

Document Control Number: EPA-HQ-OAR-2008-0508-0959.1

Comment Excerpt Number: 16

Comment: The EU emissions trading scheme does not require general reporting of wastewater emissions, but focused on combustion emissions. Due to the complexities outlined above and the relative insignificance of these emissions when compared to combustion emissions, PhRMA believes that facilities should not have to calculate their GHG emissions from wastewater treatment under this reporting rule.

Response: At this time EPA is not going final with the wastewater treatment subpart. As we consider next steps, we will be reviewing the public comments and other relevant information. Thus, we are not responding to comments on this subpart at this time.

Commenter Name: P. Hill

Commenter Affiliation: Drexel University

Document Control Number: EPA-HQ-OAR-2008-0508-0232.1

Comment Excerpt Number: 2

Comment: Inclusion of emissions by farms and landfills will complete the picture to include all major production sources of GHGs. Providing for uniformity in data collection is a necessary first step to using this information in all stages of policy development, from identifying the problem and proposed solutions, to selection and implementation, to evaluation of existing policies and appropriate revision.

Response: The final rule requires reporting from manure management systems that emit combined emissions of methane and nitrous oxide at or above the 25,000 metric ton CO₂e threshold. For discussion of farms and other agricultural processes in general, see the response to comment EPA-HQ-OAR-2008-0508-0595, excerpt 7. Regarding landfills, EPA thanks the commenter for their input and has included municipal solid waste landfills in the final rule. At this time, EPA is not going final with industrial landfills. As we consider next steps, we will be

reviewing the public comments and other relevant information. Thus, we are not responding to comments on industrial landfills at this time.

Commenter Name: James Greenwood

Commenter Affiliation: Valero Energy Corporation

Document Control Number: EPA-HQ-OAR-2008-0508-0571.1

Comment Excerpt Number: 4

Comment: To the extent that EPA continues to pursue the separate collection of fuel and product data, Valero supports having all importers be required to report total petroleum product import related emissions. Even with this product reporting, the domestic refining industry is disadvantaged relative to importers in two ways. First, under the Proposed Rule importers are correctly exempt from reporting products such as asphalt, road oil, lubricants and waxes that are not used in a manner that emits GHGs. Domestic producers of such products should similarly be allowed to carve these products out of any downstream inventories. Thus, foreign producers will have less of a reporting burden than domestic refiners. Valero requests equal treatment among importers, exporters, and refiners, as noted in the next section. At 74 Fed. Reg. 16571 of the preamble points out that EPA's proposed definition for petroleum products for importers and exporters in Subpart A at Section 98.6 excludes asphalt and road oil, lubricants, waxes, plastics, and plastic products, which unfairly disadvantage domestic refining. As noted above, refiners, importers, and exporters should all have the same reporting requirements for petroleum products that do not result in GHG emissions. Valero urges EPA to revise the definition of petroleum product in Subpart A at Section 98.6 so the exclusion of asphalt and road oil, lubricants, waxes, plastics, and plastic products also applies to importers, exporters, and refiners. Second, EPA's Proposed Rule burdens the domestic refiner's production with an inventory that reflects the actual production emissions and the estimated emissions from fuel combustion. An importer, however, has only the burden of fuel combustion. EPA should account for production emission estimates on all imports.

Response: For a response to comments on the incongruity of the reporting burden for refiners compared to importers and exporters when it comes to upstream product supply, please see Preamble Section III.MM.3. Regarding emissions from downstream use, the intent and focus of this rule is to collect data on emissions that are released in the U.S. for use in developing domestic GHG policies and potential Clean Air Act programs. Therefore, petroleum refineries must report direct emissions from all sources at the facility for which the rule contains GHG emission calculation methods. (For information and responses to comments on the definition of petroleum refineries and the specific gases and processes that must be reported by refineries, see the preamble section and comment response document for Subpart Y: Petroleum Refineries. With regard to the reporting of asphalt, road oil, lubricants and waxes by importers, EPA has revised the reporting requirements in the final to require reporting of these products. For additional information regarding this issue, see Section III.MM of the preamble.

Commenter Name: William A. White

Commenter Affiliation: Moore & Van Allen

Document Control Number: EPA-HQ-OAR-2008-0508-0462.1

Comment Excerpt Number: 1

Comment: Although the proposed GHG Reporting Rule encompasses direct source emissions from domestically located facilities, the rule does not account for global greenhouse gas emissions which result from imported products purchased by domestically-located industry. A company that out-sources its manufacturing requirements to nations with little or no regulation will not be required to report any emissions created by the manufacture of its products. The inequitable impact of this rule on a company that manufactures its products domestically, versus a company that out-sources its manufacturing overseas, and then sells the imported product domestically, should be accounted for by the final GHG Reporting Rule. Under the proposed rule, the company that imports and sells a foreign-manufactured product would not be required to report or account for the GHG emissions associated with their product in any way. This not only ignores the GHG emissions associated with the product being imported, it harms the environment by providing incentives for companies to relocate manufacturing to nations with little or no regulation, as the manufacturing processes in those nations often result in 5 times more greenhouse gas emissions than the equivalent amount of production in the U.S. Failing to account for this type of foreign GHG emission, or "embodied carbon," creates an incentive for companies to relocate manufacturing overseas to low-cost nations where there is little or no regulation. It fails to accomplish the goal of accounting for (and reducing) greenhouse gas emissions because emissions that "migrate" or "leak" to less regulated, less efficient countries are simply not counted. The EPA Greenhouse Gas Reporting Rule should account for emissions that result from the manufacture of imported materials that are GHG/carbon intensive. This will ensure fair reporting requirements that better capture a company's complete carbon footprint. Otherwise, companies that keep efficient, regulated operations here in the U.S. will have incentives to outsource GHG/carbon intensive activities to countries with little or no regulation, resulting in an overall increase in global Greenhouse gas emissions and greater harm to the environment. We believe that there are important U.S.-based consumption trends not captured by the data already included in the EPA's INVENTORY OF US. GREENHOUSE GAS EMISSIONS AND SINKS: 1990-2007 (April 2009), as we now import more and more products whose GHG emissions are attributed to the country where they were manufactured. Existing (and now proposed) data tell us nothing about how much our consumption of foreign-made products has driven GHG emissions in the products' countries of origin. The EPA's proposed rule fails to measure the consequences of our consumer choices; rather, they track only the GHGs generated in the U.S., which means, broadly, GHGs generated by our domestic industrial and agricultural output and our residential and transportation-related consumption. That doesn't make these numbers irrelevant, or even misleading, as the emissions analyzed by EPA are those that the U.S. government theoretically has the most power to regulate or control. But we surely have to look at other data and analyze it in other ways in order to truly understand and address our national contribution to climate change. We may find that much of our contribution to the problem is shifting off of U.S. soil and that it will have to be addressed in other ways. New research published in the scientific journal Geophysical Research Letters, details that approximately 9% of total Chinese emissions are the result of manufacturing goods for the United States. About 33% of all Chinese carbon emissions between 2002 and 2005 -- or half of its rise over that period -were the result of producing goods for export. Considering that China's GHG emissions rose 660 metric tons between 2004 and 2005 alone (the last year reported by the World Resources Institute), the impact on the global environment attributed to emissions from materials imported into the United States is staggering and cannot be ignored. Furthermore, in its annual International Energy Outlook, the U.S. Energy Information Administration (EIA), an arm of the U.S. Department of Energy, predicts C02 emissions from the developing world will exceed those of developed, industrialized countries in 2030 by 77 percent. These reports underscore that "offshored emissions" is an unresolved issue that should be accounted for under the proposed

rulemaking. Among many other shortcomings, this rule and further unilateral regulation which does not account for "imported GHG's" would fail to give the U.S. industrial sector recognition for GHG emission reductions and in fact, would penalize them for their successes and long term investment in energy efficiency, GHG reductions and faithfulness to the U.S. Economy and the American worker. Both absolute GHG emissions and GHG intensity per unit of product have been reduced significantly by U.S. industry. Industrial sector greenhouse gas emissions are 8% below 1990 levels. The industrial sector is the only sector whose greenhouse gas emissions are below 1990 levels and, some industries, like the U.S. steel industry reduced direct emissions of greenhouse gases by 29 percent, which is over 3 times the amount required by the Kyoto Protocol. This reduction occurred even as nationwide steel production increased during the same period. All other sectors' greenhouse gas emissions are up over 30 percent versus 1990. Economic growth increases product demand and absolute GHGs. The industrial sector finds itself in a difficult position. The U.S. economy cannot grow without using more, not less of these products. Higher product demand increases absolute GHG emissions. In fact, a direct result of the stimulus package directed toward public works projects such as building roads and bridges will be increased product demand for steel and cement that will increase absolute GHGs. The industrial sector can continue to reduce its GHG intensity but we are very limited in our ability to reduce absolute GHG emissions. We are mostly stuck with the type of energy inputs that we currently have for fossil fuels or biomass and we are dependent upon our electricity provider's GHG intensity. Those two factors are out of our control. Supplying the u.S. with more volumes of steel, cement, plastics, fertilizer, aluminum, glass (etc.) to enable economic growth of the country means use of more energy, not less. This means greater absolute GHG emissions. Improving energy efficiency, in general, does not reduce absolute GHG emissions - it reduces GHG intensity of the product produced. Placing an absolute GHG emission constraint on the industrial sector theoretically limits the total volume of production that can be produced. If U.S. producers cannot supply these products here, they will be imported and GHG emissions will occur in other countries. Conversely, the EPA cannot regulate a decision by companies to import energy intensive products manufactured in countries without carbon constraints. The GHG emissions of the imported products from other countries cannot be regulated under the Clean Air Act. But these emissions can, and should be, accounted for in order to fully assess the impact of GHGs on the environment. For instance, the USA currently imports about 25% of the steel products used domestically. By leaving out the GHG emissions attributable to these imports, this omission in the proposed rule may cause an underestimate of the GHG generated by our economy. A rule that allows parties to import such products and not report their emissions to the agency would be environmentally irresponsible. The global reality is that developing nations place a significant priority on their manufacturing sector for both domestic economic growth and exports. They have a long history of providing all types of subsidies that include energy and trade credits. If they subsidize energy costs for their manufacturers, why wouldn't they also subsidize the cost of purchased GHG allowances to enable exports to the United States? We must not put our manufacturing sector and its employees at a competitive disadvantage to the rest of the world, and in particular, the so-called BRIC (or developing countries - Brazil, Russia, India and China) through greenhouse gas regulation or accounting that is focused only on domestically produced emissions. The evidence is that this type of rule will provide an incomplete picture of the GHG impacts of domestic activity. The EPA is acting arbitrarily and capriciously by enacting any reporting rule which fails to account for emissions that result from the manufacture and import of materials that are GHG/carbon intensive.

Response: This rule is focused primarily on collecting information at the facility, versus corporate, level in order to gather information to evaluate options for addressing GHG emissions

and climate change under the CAA. It is not intended to accurately estimate worldwide corporate level carbon footprints. EPA undertook significant efforts to minimize the burden associated with this rule to address the concerns about leakage raised by commenter. Importantly, because sources must report annually unless they reduce emissions below certain levels for a certain number of consecutive years, or cease GHG-emitting operations, we will be able to track any such leakage. We recognize the significance of this issue in the ongoing climate policy debate. EPA continues to follow policy developments and could undertake work in this area at the appropriate time.

Commenter Name: Jeff A. Myrom

Commenter Affiliation: MidAmerican Energy Holdings Company **Document Control Number:** EPA-HQ-OAR-2008-0508-0581.1

Comment Excerpt Number: 8

Comment: Geothermal energy, one of the oldest and most consistent sources of renewable generation, taps into a geothermal resource in an underground reservoir, typically in areas associated with volcanic and tectonic activity, and utilizes a fluid, steam or a combination of the two. Geothermal resources contain dissolved gases, the composition of which differs greatly based on geological conditions with the geothermal reservoir. CO₂ is one of the gases that is contained in geothermal reservoirs; however, isolating the emissions attributable to electricity production is difficult, as evidenced by the efforts in California to develop a mandatory greenhouse gas reporting rule that includes requirements to report greenhouse gas emissions from geothermal resources through conservative default factors or difficult to ascertain measurements. MidAmerican believes that EPA should treat renewable forms of generation consistently—if biomass-based electricity generation is excluded from the proposed reporting rule, similar treatment should be afforded to geothermal generation.

Response: Neither the proposed rule nor the final rule require reporting of GHG emissions from geothermal energy.

Commenter Name: Chris Greissing

Commenter Affiliation: Industrial Minerals Association - North America (IMA-NA)

Document Control Number: EPA-HQ-OAR-2008-0508-0705.1

Comment Excerpt Number: 2

Comment: Preamble – Table 1 – Soda ash manufacturing (page 16449): The category "Soda ash manufacturing" is described by NAICS code 325181. The activities conducted by all U.S. producers of soda ash are more accurately described by NAICS code 212391. IMA-NA proposes that the section be revised as follows: the term "Soda Ash Manufacturing" be replaced with the term "Soda ash, natural, mining and/or beneficiation" and that NAICS code 325181 be replaced with NAICS code 212391.

Response: Soda ash manufacturing facilities can be in both of these NAICS and we have added the suggested NAICS to Table 1 in the Regulated Entities section of the preamble for the final rule.

2. SELECTION OF LEVEL OF REPORTING

Commenter Name: Bryan Vickers

Commenter Affiliation: The Glass Packaging Institute (GPI) **Document Control Number:** EPA-HQ-OAR-2008-0508-0670.1

Comment Excerpt Number: 3

Comment: A company that has more than one facility that meets the reporting threshold should be able to aggregate all of its facilities that meet that threshold and file one corporate-level emission report. The Proposed GHG Reporting Rules require reporting of GHG emissions from glass production operations at the facility level, rather than at the corporate level. While GPI has no problem with using facility emission rates to determine applicability, we strongly urge the adoption of corporate-level reporting of GHG emissions. As GHG is a global issue and not a local issue, the relevant information that is required is the amount of emissions and not the location of those emissions. EPA seems to have selected facility-level reporting out of convenience. The Preamble provides that facility-level emission calculations are feasible and will produce accurate emissions estimates. Corporate-level reporting, however, is equally feasible and capable of producing accurate emissions estimates, and may have the added benefit of encouraging corporate-wide efficiencies. It is presumed that the reported GHG emissions will be used as a baseline from which to measure GHG emissions reductions. Facility-level reporting likely will lead to a regulatory scheme that imposes emissions reductions on the facility level. Facility-level compliance will tie the hands of industry and will affect its ability to shift production, when necessary, to different facilities. For example, if a company determines that it is advantageous to shift production from one facility to another, and thus decrease emissions from one facility and transfer them to another, it may not be able to do that if GHG emissions are linked to a particular facility rather than to a particular company. In contrast, if a company were able to report its GHG emissions on a corporate-wide basis, it would have the flexibility to respond to market conditions and shift production between locations as needed, without showing any net increase in company-wide emissions. This likely also would have the added benefit that glass could be produced closer to the location where it would be consumed, thus reducing GHG emissions associated with transportation.

Response: Please see the preamble for the response on the selection of the level of reporting. This rule requires only the reporting of emissions and does not set any limits on GHG emissions from individual facilities. Since this rule imposes no restrictions on emissions, corporate decisions regarding production at individual facilities are not affected by this rule. EPA will consider the above comments as it evaluates options for addressing GHG emissions and climate change under the CAA.

Commenter Name: Lloyd Stone

Commenter Affiliation: Westlake Chemical Corporation

Document Control Number: EPA-HQ-OAR-2008-0508-0442.1

Comment Excerpt Number: 1

Comment: Westlake agrees with EPA's proposed facility-level reporting approach because this approach is consistent with other state and federal rules. We agree that this approach allows flexibility for companies in reporting the data.

Response: EPA thanks the commenter for their input. Please see the preamble for the response on the selection of the level of reporting.

Commenter Name: Dan Elwell

Commenter Affiliation: Aerospace Industries Association (AIA) Document Control Number: EPA-HQ-OAR-2008-0508-1140.1

Comment Excerpt Number: 1

Comment: EPA's preference is valid: reporting at the facility level is more efficient. It conforms to most other requisite government GHG reporting, is more efficient for monitoring, and corporate-level reporting would add layers of complexity.

Response: EPA thanks the commenter for their input. Please see the preamble for the response on the selection of the level of reporting.

Commenter Name: Maureen Beatty

Commenter Affiliation: National Refrigerants, Inc. (NRI) **Document Control Number:** EPA-HQ-OAR-2008-0508-0434.1

Comment Excerpt Number: 15

Comment: NRI supports reporting on a corporate basis for both producers and importers of industrial GHGs. This type of reporting is consistent with current requirements under the TRI rules and CAA reporting requirements in Title VI for ODS.

Response: Please see the preamble for the response on the selection of the reporting level.

Commenter Name: Kyle Pitsor

Commenter Affiliation: National Electrical Manufacturers Association (NEMA)

Document Control Number: EPA-HQ-OAR-2008-0508-0621.1

Comment Excerpt Number: 8

Comment: NEMA Carbon/Manufactured Graphite EHS Committee agrees with the EPA's proposal to require emitters to determine applicability and to report at the facility level (unlike some other voluntary greenhouse gas reporting protocols), based on the argument that changes in organizational boundaries can be difficult to track but emissions from individual facilities will be much easier to monitor over a long period of time. This approach will also be consistent with the permitting and other provisions under the CAA, as well as other emission/release reporting under different existing environmental reporting rules, like the SARA Toxics Release Inventory (TRI) Report.

Response: EPA thanks the commenter for their input. Please see the preamble for the response on the selection of the level of reporting.

Commenter Name: David Stirpe

Commenter Affiliation: Alliance for Responsible Atmospheric Policy (ARAP)

Document Control Number: EPA-HQ-OAR-2008-0508-0527.1

Comment Excerpt Number: 12

Comment: While the Proposed Rule states EPA's preference for facility reporting, the Alliance requests that reports be submitted on a corporate basis. This conforms to the TRI reports and other Clean Air Act reports, and reduces the burden on corporations to have each of its facilities report separately. EPA may still require that the data be submitted in a manner that allows the data to be differentiated for each facility.

Response: See the preamble for the response on the selection of the level of reporting.

Commenter Name: Juanita M. Bursley

Commenter Affiliation: GrafTech International Holdings Inc. Company (GrafTech)

Document Control Number: EPA-HQ-OAR-2008-0508-0686.1

Comment Excerpt Number: 11

Comment: GrafTech agrees with the EPA's proposal to require emitters to determine applicability and to report at the facility level (unlike some other voluntary greenhouse gas reporting protocols), based on the argument that changes in organizational boundaries can be difficult to track but emissions from individual facilities will be much easier to monitor over a long period of time. This approach will also be consistent with the permitting and other provisions under the CAA, as well as other emission/release reporting under different existing environmental reporting rules, like the SARA Toxics Release Inventory (TRI) Report.

Response: EPA thanks the commenter for their input. Please see the preamble for the response on the selection of the level of reporting.

Commenter Name: J. P. Blackford

Commenter Affiliation: American Public Power Association (APPA) **Document Control Number:** EPA-HQ-OAR-2008-0508-0661.1

Comment Excerpt Number: 14

Comment: APPA supports EPA's conclusion that corporate level reporting of GHG emissions would be overly complex and not appropriate for the rule. A facility level approach will capture the same detail of emissions as well as streamline the process of data collection and reporting versus requiring the aggregation of the data from multiple facilities that are owned by one corporation.

Response: EPA thanks the commenter for their input. Please see the preamble for the response on the selection of the level of reporting.

Commenter Name: Michael Bradley

Commenter Affiliation: The Clean Energy Group (CEG)

Document Control Number: EPA-HQ-OAR-2008-0508-0479.1

Comment Excerpt Number: 7

Comment: The Clean Energy Group supports the facility-level reporting approach EPA has proposed for most source categories. Facility-level reporting by owners or operators is consistent with other Clean Air Act and state-level regulatory programs and coordination will facilitate compliance and minimize the administrative burden of the proposed rule. However, for source categories such as natural gas local distribution companies (LDCs) and electric power systems, the Clean Energy Group contends that it is appropriate to approach reporting on a utility-wide basis rather than facility-specific. The Clean Energy Group requests that EPA clarify its approach specifically in the electric power systems category, as further explained below. The proposed rule states that the owner or operator of a facility (or the utility in the case of LDC and electric power system reporting) would be required to report greenhouse gas emissions from all source categories at the facility for which there are methods developed and listed in the proposed rule. This requirement raises several questions for the Clean Energy Group companies as they assess the implications of this proposal on their individual lines of business. The definition of facility as "under common ownership or common control" introduces some specific questions for which the Clean Energy Group requests clarification by EPA. Since deregulation, co-located substations and other supporting infrastructure at electric generation facilities are often owned by more than one entity. In these situations, would the substation owner be required to report emissions from a co-located substation due to the fact that the reporting obligation is triggered at the electric generating facility? The Clean Energy Group's interpretation of the proposed rule is that the owner/operator of the facility would report greenhouse gas emissions from the facility. If the co-located substation is owned by another entity, then that entity would be required to report if its SF₆ capacity across its entire electric power system was greater than the threshold in the proposal, 17,820 lbs SF₆. If the co-located switchyard included SF₆-containing equipment owned by the same electric generating facility owner, then the SF₆ emissions would be included in the reporting. The Clean Energy Group requests that EPA clarify in the final rule the reporting requirements in these situations.

Response: Please see the preamble for the response on the selection of the level of reporting. As described in preamble to the final rule, local distribution companies (LDCs) for the supply of natural gas report at the corporate level following the provisions in subpart NN. At this time EPA is not going final with subpart DD (SF₆ from Electrical Equipment) or subpart W (Oil and Natural Gas Systems). As we consider next steps, we will be reviewing the public comments and other relevant information. Thus, we are not responding to comments on subparts DD and W at this time.

Commenter Name: Robert J. Martineau, Jr

Commenter Affiliation: Counsel, Waller Lansden Dortch & Davis, LLP

Document Control Number: EPA-HQ-OAR-2008-0508-0414.1

Comment Excerpt Number: 5

Comment: Nissan concurs that the facility level is the appropriate reporting level for stationary source emissions. Nissan concurs that for vehicle and engine manufacturers, the GHG emissions for vehicles and engines should be done based on the company-wide production of the product and not attempt to attribute those emissions to particular facilities, or to require the users of those vehicles to report GHG emissions.

Response: EPA thanks the commenter for their input. Please see the preamble for the response on the selection of the level of reporting.

Commenter Name: Michael A. Palazzolo Commenter Affiliation: Alcoa, Inc.

Document Control Number: EPA-HQ-OAR-2008-0508-0650.1

Comment Excerpt Number: 1

Comment: We support the proposed approach of facility-wide reporting. Facility-wide reporting will provide data suitable for climate policy decisions, while minimizing the complexity and cost of GHG emissions reporting.

Response: EPA thanks the commenter for their input. Please see the preamble for the response on the selection of the level of reporting.

Commenter Name: Linda Farrington

Commenter Affiliation: Eli Lilly and Company (Lilly)

Document Control Number: EPA-HQ-OAR-2008-0508-0680.1

Comment Excerpt Number: 1

Comment: Lilly supports EPA's proposal to require reporting at a facility level instead of at a corporate level. We believe facility level reporting is most appropriate and will maintain consistency with other CAA regulatory programs. Corporate-wide reporting would result in emissions data that is most likely not as granular as the agency would desire in order to use the information for regulatory purposes and to assess the number and types of operations that contribute most significantly to GHG emissions.

Response: EPA appreciates the comment. We have retained facility level reporting in the final rule because it is consistent with other CAA programs (e.g., the Acid Rain Program) and statelevel programs, is familiar to environmental managers, and avoids the complexities of corporate reporting. We received several comments on this issue supporting facility level reporting, for these and other reasons.

Commenter Name: Christina T. Wisdom

Commenter Affiliation: Texas Chemical Council (TCC)

Document Control Number: EPA-HQ-OAR-2008-0508-0638.1

Comment Excerpt Number: 2

Comment: TCC agrees with EPA's proposed facility-level reporting approach because this approach is consistent with other state and federal rules. We agree that this approach allows flexibility for companies in reporting the data.

Response: See the response to comment EPA-HQ-OAR-2008-0508-680.1, excerpt 1.

Commenter Name: Chris Hobson

Commenter Affiliation: Southern Company

Document Control Number: EPA-HQ-OAR-2008-0508-1645.2

Comment Excerpt Number: 4

Comment: Southern Company agrees with and supports much of the approach taken by EPA. Reporting by source category and at the facility level is consistent with the well-proven Acid Rain Program and lowers implementation costs for the electric utility and other reporters, while obtaining verifiable data.

Response: See the response to comment EPA-HQ-OAR-2008-0508-680.1, excerpt 1.

Commenter Name: Chris Korleski

Commenter Affiliation: State of Ohio Environmental Protection Agency

Document Control Number: EPA-HQ-OAR-2008-0508-0598.1

Comment Excerpt Number: 3

Comment: It is extremely useful that direct emitters report based on reporting category at the facility-level. For example, if a facility operates a large boiler as well as an aluminum production process the two types of categories would be reported separately to accurately identify the origin of each GHG emission source. Ohio EPA agrees with this method and with the source categories put forth in the proposed rule.

Response: See the response to comment EPA-HQ-OAR-2008-0508-680.1, excerpt 1.

Commenter Name: Randall R. LaBauve

Commenter Affiliation: Florida Power & Light (FPL) Group **Document Control Number:** EPA-HQ-OAR-2008-0508-0624.1

Comment Excerpt Number: 7

Comment: FPL Group supports the facility-level reporting approach EPA has proposed for most source categories. Facility-level reporting by owners or operators is consistent with other Clean Air Act and state-level regulatory programs and coordination will facilitate compliance and minimize the administrative burden of the proposed rule.

Response: See the response to comment EPA-HQ-OAR-2008-0508-680.1, excerpt 1.

Commenter Name: B. Gentile

Commenter Affiliation: Drexel University

Document Control Number: EPA-HQ-OAR-2008-0508-0231.1

Comment Excerpt Number: 2

Comment: It only requires reporting on the facility level, except on certain instances where they would have to report on the corporate level. This is a good way for the government, in a limited role, to try and help the facilities self-regulate to try and improve the environment.

Response: See the response to comment EPA-HQ-OAR-2008-0508-680.1, excerpt 1.

Commenter Name: Larry R. Soward

Commenter Affiliation: Texas Commission on Environmental Quality (TCEQ)

Document Control Number: EPA-HQ-OAR-2008-0508-0619

Comment Excerpt Number: 13

Comment: The facility-level reporting proposals are reasonable and appropriate.

Response: See the response to comment EPA-HQ-OAR-2008-0508-680.1, excerpt 1.

Commenter Name: Ram K. Singhal

Commenter Affiliation: Rubber Manufacturers Association (RMA) **Document Control Number:** EPA-HQ-OAR-2008-0508-0600

Comment Excerpt Number: 9

Comment: EPA solicits comment on page 16,470 regarding whether to require facility-wide reporting or company-wide reporting. RMA supports EPA's preferred option of facility-wide reporting. First, most CAA requirements apply on a facility-wide basis, and it is more manageable for purposes of monitoring and reporting purposes than aggregating emissions on a company-wide basis. Second, it is the type of reporting that our environmental managers have the most experience with already. Third, company-wide reporting could become extremely difficult because the corporate status of facilities may change over a year, and the co-ownership of certain facilities by one of more corporate entities could make it much more difficult to report emissions.

Response: See the response to comment EPA-HQ-OAR-2008-0508-680.1, excerpt 1.

Commenter Name: Lindsay Moseley Commenter Affiliation: Sierra Club

Document Control Number: EPA-HQ-OAR-2008-0508-0212t

Comment Excerpt Number: 2

Comment: EPA made the right choice when it decided to collect most of its data on individual facilities, rather than aggregating across entire corporate entities. Gathering information on individual factories and generating stations will help EPA design carefully targeted rules that will maximize environmental benefits by showing exactly where businesses could manage emissions more efficiently. Additionally, facilities may change hands, and corporate identities often shift. In our opinion, tethering data to physical sources ensures that data will be easily usable over the long term.

Response: EPA thanks the commenter for their input. Please see the preamble for the response on the selection of the level of reporting.

Commenter Name: Kelly R. Carmichael

Commenter Affiliation: NiSource

Document Control Number: EPA-HQ-OAR-2008-0508-1080.2

Comment Excerpt Number: 3

Comment: NiSource generally supports the facility-level reporting approach that EPA has proposed for most source categories. Facility-level reporting by owners or operators is consistent with other Clean Air Act and state-level regulatory programs and coordination will facilitate compliance and minimize the administrative burden of the proposed rule. The proposed rule states that the owner or operator of a facility would be required to report GHG emissions from all source categories at the facility for which there are methods developed and listed in the proposed rule. This requirement raises questions for NiSource companies as they assess the implications of this proposal on their individual lines of business. NiSource seeks clarification on implementing this requirement from EPA.

Response: See the response to comment EPA-HQ-OAR-2008-0508-680.1, excerpt 1. For a list of affected source categories and a discussion of the applicability criteria for this rule, see Section II.A of the preamble. EPA intends to conduct an active outreach and technical assistance program to help facilities determine applicability and reporting requirements. Plain English guides to the rule and a Web-based applicability tool will be available to the public on our website. EPA also plans to conduct a number of webinars immediately following promulgation. These materials have been tailored to the various sectors and target small businesses and those industrial, commercial, and institutional sectors that are less familiar with air pollution regulation.

Commenter Name: Brian Jones

Commenter Affiliation: Clean Energy Group (CEG), M.J. Bradley & Associates, LLC

Document Control Number: EPA-HQ-OAR-2008-0508-0212e

Comment Excerpt Number: 2

Comment: CEG commends EPA for proposing facility-level reporting for most source categories due to the fact that facility-level reporting by owners or operators is consistent with the other Clean Air Act or State-level regulatory programs. This will facilitate compliance and minimize the administrative burden of the Proposed Rule.

Response: EPA thanks the commenter for their input. Please see the preamble for the response on the selection of the level of reporting.

Commenter Name: John S. Hayden

Commenter Affiliation: National Stone, Sand & Gravel Association (NSSGA)

Document Control Number: EPA-HQ-OAR-2008-0508-0853.1

Comment Excerpt Number: 2

Comment: EPA's proposal would apply separately to large downstream facilities that emit GHGs and to upstream suppliers of fossil fuels and industrial GHGs, as well as to manufacturers of vehicles and engines. Reporting would be at the facility level, with the exception that certain suppliers and vehicle and engine manufacturers would report at the corporate level. NSSGA supports this approach as reasonable and consistent with the purposes of the reporting rule. At

NSSGA member operations, the fossil fuels supplied by producers and importers are used and ultimately emitted by a large number of relatively small mobile and stationary sources. As EPA notes, coverage of direct emissions would require reporting by hundreds or thousands of small facilities. The proposed rule avoids this impact by excluding these small sources but requiring reporting by the suppliers of industrial gases and fossil fuels. This approach to reporting provides an accurate estimate of national emissions while substantially reducing the number of reporters. EPA has recognized that this approach "double counts" emissions in some cases, but points out that upstream and downstream emission controls will differ in many cases and the data are therefore needed to evaluate potential control options.

Response: See the response to comment EPA-HQ-OAR-2008-0508-680.1, excerpt 1. For more information on upstream and downstream reporting, see the Section II.D of the preamble and Volume 9 (Legal Issues) of this document.

Commenter Name: Scott Davis

Commenter Affiliation: Arizona Public Service (APS)

Document Control Number: EPA-HQ-OAR-2008-0508-0639.1

Comment Excerpt Number: 7

Comment: EPA states in the preamble that "... corporate-level reporting is overly complex under a mandatory system involving many reporters and thus is not appropriate for this rule, except where discussed below. Complex ownership structures and the frequent changes in ownership structure make it difficult to establish accountability over time and ensure consistent and uniform data collection at the facility-level. Because the best technical knowledge of emitting processes and emissions levels exists at the facility level, this is where responsibility for reporting should be placed." APS supports this position and fully endorses facility level reporting.

Response: See the response to comment EPA-HQ-OAR-2008-0508-680.1, excerpt 1.

Commenter Name: David Rich

Commenter Affiliation: World Resources Institute (WRI)

Document Control Number: EPA-HQ-OAR-2008-0508-0642.1

Comment Excerpt Number: 6

Comment: WRI supports EPA's proposal to require reporting at the facility level, except in the specified cases.

Response: See the response to comment EPA-HQ-OAR-2008-0508-680.1, excerpt 1.

Commenter Name: Robert P. Strieter

Commenter Affiliation: The Aluminum Association

Document Control Number: EPA-HQ-OAR-2008-0508-0350.1

Comment Excerpt Number: 13

Comment: The Aluminum Association supports the proposed requirement for facility level reporting of GHG emissions.

Response: See the response to comment EPA-HQ-OAR-2008-0508-680.1, excerpt 1.

Commenter Name: Mary J. Doyle

Commenter Affiliation: BG North America, LLC (BG)

Document Control Number: EPA-HQ-OAR-2008-0508-0714.1

Comment Excerpt Number: 6

Comment: Reporting at the facility level is the most appropriate method of collecting this data. Facility reporting is consistent with the current method reporting in various federal and state regulatory programs. To require something other than facility reporting, such as corporate level or equity ownership, would result in a program that was cumbersome and difficult to administer.

Response: See the response to comment EPA-HQ-OAR-2008-0508-680.1, excerpt 1.

Commenter Name: Geri Kantor and Doug Cogan Commenter Affiliation: RiskMetrics Group

Document Control Number: EPA-HQ-OAR-2008-0508-0369.1

Comment Excerpt Number: 1

Comment: RiskMetrics Group supports the selection of facility-level reporting of greenhouse gas emissions, as put forth in the Preamble of the proposed rule, Section IV. D. Rationale for Selection of Level of Reporting. However, we believe that facility-level emissions data would be of significantly more value to the investor community and its service providers if, in addition to facility identification numbers, corporate parent identification numbers, especially of the ultimate corporate parent, are also made available.

Response: See the response to comment EPA-HQ-OAR-2008-0508-680.1, excerpt 1. For the response to the comment on reporting of corporate parent identification numbers, please see the preamble for the response on the selection of the level of reporting.

Commenter Name: Jeanne Herb

Commenter Affiliation: New Jersey Department of Environmental Protection (NJDEP)

Document Control Number: EPA-HQ-OAR-2008-0508-0834.1

Comment Excerpt Number: 2

Comment: The USEPA rule should require reporting of state-level quantities for upstream sources of fossil fuel and industrial gases. The proposed reporting requirements for "upstream" sources do not provide needed information at the state level. The information required under proposed Subparts KK through PP is limited to national level quantities. This is a significant gap and will reduce the ability of the states to use the data to develop complete statewide inventories of greenhouse gases. Subparts KK through PP should require reporting of state level information similar to that required by the Energy Information Administration, including fossil fuel use reported separately for end use energy sectors (transportation, residential, commercial, industrial, electricity generation).

Response: The intent of the final rule is to collect accurate and consistent GHG emissions data that can be used to inform future climate policies at the national level. Requiring upstream sources to report state level quantities exceeds the purposes for which this rule was intended. EPA has concluded that upstream sources of fossil fuel and industrial gases may not know with certainty the fate of the products supplied. A comprehensive and rigorous system for tracking the end user of these products (either by state or by sector or both) is beyond the scope of this rule and would require a more burdensome reporting obligation for suppliers and other downstream users of these products. The only exception to this rationale is NG local distribution companies under Subpart NN, which are required to report the end-use sector of delivered gas (residential, commercial, industrial, electricity generation). EPA has concluded that since end-users are physically connected to the LDC by pipeline and by payment accounts, LDCs can track end-users by sector without a significant amount of burden.

Commenter Name: Steven D. Meyers

Commenter Affiliation: General Electric Company (GE)

Document Control Number: EPA-HQ-OAR-2008-0508-0532.1

Comment Excerpt Number: 11

Comment: GHG reporting on a facility basis will most likely be needed to implement a cap and trade program because GHG emissions allowances will likely be established on a facility-byfacility basis. Other approaches are possible, such as entity-wide reporting, or on the other extreme, emissions unit reporting, but given the need to support a cap and trade program and the need to narrowly tailor the Mandatory Program to limit unnecessary costs, EPA should pursue facility level reporting for all source categories. Requiring manufacturing, service and other nonutility facilities to report on an individual emission unit basis will greatly increase their GHG reporting burden while providing few benefits, particularly for industrial manufacturing facilities. Industrial facilities typically will have many smaller GHG emission units. For example, an industrial manufacturing facility may have several boilers for generating process steam and various fuel fired furnaces, dryers, process flames, incinerators, space heaters and water heaters, etc. Typically, an industrial facility measures its fuel use by the entire facility through fence line meters or fuel purchase records, although an additional meter may be provided in the boiler house. Often facilities do not have the ability to measure fuel use at individual emission units because they have not been required to do so by regulatory requirements and because of the cost involved. Therefore, reporting entities would face significant cost and reporting burden if they were required to report emissions for individual fuel combustion units. In addition, data from individual units is not needed to implement a cap and trade program. A GHG emission allowance can be set for the entire facility and the facility can demonstrate compliance with the allowance by reporting its facility wide emissions.

Response: EPA received several comments regarding the provision in the proposed rule to collect unit and process level data for several source categories. Most of the commenters were opposed to this approach. They raised concerns that it would substantially increase reporting costs and they questioned the value of the resulting data under a cap and trade program. One commenter stated that EPA did not need to collect these data because they were already available under the Title V program or from the Energy Information Administration and also raised concerns regarding confidential business information. Another opined that Subpart A of the proposed rule was misleading in its discussion of facility level reporting and said that EPA had "failed to make the case" for collecting unit or process level data. One commenter supported the

collection of unit-level data, noting that such data were collected for other Clean Air Act programs and that if would add a level of detail that could not otherwise be obtained given the difficulty in disaggregating facility level data to this level.

In the final rule, EPA provides additional flexibility for facilities reporting Subpart C (Stationary Combustion). We have broadened the criteria for aggregating small combustion units for the purpose of reporting. EPA has also clarified the use of the common pipe metering option, so that all stationary fuel combustion units using a common fuel that is metered through a common supply line can be combined for the purpose of reporting. The final rule also expands the types of units that can use the simpler Tier 1 and Tier 2 methods. Portable combustion units, emergency generators, and other emergency equipment are exempt from reporting. These provisions greatly reduce the burden on reporters that have a large number of small stationary combustion units. Similar to combustion, we have also introduced some flexibility in lime manufacturing and process units at cement facilities in terms of unit and process level reporting. For additional discussion of these changes, see the preamble section on general stationary fuel combustion sources, lime and cement.

We have retained the reporting of unit and process level data in the final rule for other source categories such as, petroleum refineries, petrochemical production and iron and steel production for several reasons. First, for these sources we have determined that facility-level reporting will not provide data of sufficient detail for developing and implementing future GHG policies. The sources for which the final rule requires unit or process level reporting are those that have larger units (greater than 250 mmbtu, which is a typical CAA cutoff point for combustion units) or specific processes that typically generate the majority of emissions at a facility. For these types of sources, the additional detail provided at the unit and process level is essential for understanding: (1) the specific sources of emissions and the amounts emitted by each unit/process; and (2) the effect of different processes, fuels, and feedstocks on emissions. Second, although many commenters focused on the level of data required under a cap and trade program, it is only one of a number of possible GHG reduction programs currently being considered. We are particularly in need of data that will inform possible actions taken under the CAA, which could include emission standards for specific processes or emission units (e.g., New Source Performance Standards). In selecting this approach, we investigated the applicability of information collected by EIA, CAA programs, and other mandatory and voluntary GHG programs. We determined that these data are not sufficient to meet the goals of this program. For example, data collected from Title V sources is of limited value for informing GHG policy decisions because the data is collected on a facility-level basis, focuses on criteria pollutants, and is generally not reported annually. Third, unit and process level data is also critical for ensuring the quality of the data reported and will enable EPA to verify the data reported by a facility is complete and accurate. For example, with unit and process level data EPA will be able to verify emissions estimates with known ranges expected from various types of processes for a given production or compare data for different plants for similar processes. It also provides information that will be useful in identifying processes that have reduced emissions over time and processes at specific plants that have the most potential for future reductions in emissions. For additional discussion of the reporting level, see the preamble response on the selection of the level of reporting.

Regarding the comment that the discussion in Subpart A of the proposal was misleading in its discussion of facility level reporting, because many of the subparts appear to require reporting by unit or process, we disagree. We have not failed to "make a case" for unit or process level

reporting. The proposal noted that we were proposing the reporting of more detailed unit and process level information for reasons we explained there, such as the need to verify emissions, understand emissions by process and unit level in order to analyze emissions trends and regulatory approaches under the CAA. Because the main purpose of the rule is to collect information for climate policy development under the CAA, EPA views unit level reporting as appropriate. Additionally, to ensure high quality verified data, EPA has decided to serve the role as verifier rather than require third-party verification. In view of this, additional unit-level information is deemed necessary to provide assurance that the reported facility-wide GHG emissions data are both credible and accurate. As discussed above, we revised our approach, as necessary, in the final rule in response to comments received.

For any concerns about confidentiality of submitted data, please see the discussion of our plans to address CBI and emissions data in the preamble section for the response on CBI. Regarding the cost associated with the reporting requirements, see EPA's Regulatory Impact Analysis (RIA) for the rule and the preamble for the response on the cost and economic impacts section of the preamble.

Commenter Name: Leslie Sue Ritts

Commenter Affiliation: National Environmental Development Association

Document Control Number: EPA-HQ-OAR-2008-0508-0504.1

Comment Excerpt Number: 3

Comment: EPA solicits comment on page 16,470 regarding whether to require facility-wide reporting or company-wide reporting. NEDA/CAP supports EPA's preferred option of facilitywide reporting for direct GHG emissions, although we note the concerns of some of our members in the refining industry. First, most CAA requirements apply on a facility-wide basis, and it is more manageable for purposes of monitoring and reporting than aggregating emissions on a company-wide basis. Second, it is the type of reporting that our environmental managers have the most experience with already. Third, company-wide reporting could become extremely difficult because the corporate status of facilities may change over a year, and the co-ownership of certain facilities by one or more corporate entities could make it much more difficult to report emissions. It is extremely important in NEDA's view that GHG emissions are reported on a facility-wide basis and not on a unit or a process basis. The general provisions in proposed Subpart A suggest that emissions would be reported facility-wide, but this may be misleading because many of the subparts appear to require reporting by an emitting unit or by an emitting process while others require general facility emission estimates. If reporting is requiring by process unit or emitting unit, the cost of the reporting will increase the cost of the program exponentially without adding significant benefit. Even if it were somehow practical or feasible to disaggregate GHG precursors on this basis, EPA has failed in the Notice of Proposed Rulemaking to make a case for why additional breakdown of emissions by process or unit is important or reasonable as opposed to facility-wide emissions calculations. The most practical and cost-effective means of reporting emissions will be on a plant through-put basis. NEDA/CAP's members want to emphasize that the overall purpose of the rule is to address the nation's concern with overall carbon in the atmosphere. Since carbon reacts in the atmosphere regardless of whether it is emitted from by an emitting process or an emitting unit, there is no reasonable basis for EPA to require GHG emissions reporting at a more specific level than by facility.

Response: With respect to corporate reporting, see the response to comment EPA-HQ-OAR-2008-0508-0680.1, excerpt 1. For the overall response on unit and process level reporting, see the response to comment EPA-HQ-OAR-2008-0508-0532.1, excerpt 11.

Commenter Name: W. Walter Tyler

Commenter Affiliation: INVISTA S.a r.l. (INVISTA)

Document Control Number: EPA-HQ-OAR-2008-0508-0481.2

Comment Excerpt Number: 1

Comment: Reporting should be performed on the Facility level, not the Unit level. For the majority of covered facilities, the reporting requirements require unit-level calculations and reporting. In the Preamble, EPA indicates that it prefers facility-level reporting over corporatelevel reporting because the latter "is overly complex under a mandatory system involving many reporters and, thus is not appropriate for this rule." 74 Fed. Reg. 16470. The Preamble also states that unit-level reporting, in a facility-level reporting scheme, is "essential for development of certain types of future policy (e.g., NSPS)." Id. Much of the unit-level data, however, already is available to EPA through existing reporting requirements, including under Title V of the Clean Air Act (CAA) and energy use reports required by the Energy Information Administration (EIA) of the Department of Energy. For example, in many Title V permits, facilities report emissions through periodic calculation of total solid or liquid fuel consumption, using reliable and proven default emission factors, but are not required to report for each individual unit. The Proposed Rule, however, adds a layer of complexity for source-specific categories requiring tracking of fuel usage for each unit, except in certain "common pipe" configurations. Tracking GHG emissions at this level will require significant investment in capital and labor with little or no corresponding benefit over that which can be achieved through aggregation of all common fuel sources or reporting at the facility-level. In addition, facility-level reporting mitigates concerns with respect to confidentiality of the type of data required.

Response: For the response to the comment on unit/process-level reporting, see the response to comment EPA-HQ-OAR-2008-0508-0532.1, excerpt 11. During the development of the rule, EPA determined that the reports required by EIA, CAA programs, and other mandatory and voluntary GHG programs was not sufficient to meet the goals of this program. For example, data collected from Title V sources is of limited value for informing GHG policy decisions because the data is collected on a facility-level basis, focuses on criteria pollutants, and is generally not reported annually. For any concerns about confidentiality of submitted data, please see the discussion of our plans to address CBI and emissions data in the preamble section for the response on CBI. Regarding the cost associated with the reporting requirements, see EPA's Regulatory Impact Analysis (RIA) for the rule and the preamble for the response on the cost and economic impacts section of the preamble.

Commenter Name: Nancy N. Young

Commenter Affiliation: Air Transport Association of America, Inc. (ATA)

Document Control Number: EPA-HQ-OAR-2008-0508-0522.1

Comment Excerpt Number: 17

Comment: The level of reporting should be tailored to the particular source category, based upon further formal and informal stakeholder input, particularly if EPA intends to require

reporting for facilities at the process and unit level. Failure to do so will certainly prove unduly burdensome in many instances; if a general approach is adopted that does not allow for additional, meaningful input from the regulated community.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0532.1, excerpt 11. Through this rulemaking process EPA has received significant input from stakeholders on this matter. For additional information on EPA's outreach activities, see the response to comment EPA-HQ-OAR-2008-0508-0433.1, excerpt 1 in Volume 7 (The Rule Development Process, Statutory and Executive Order Reviews, and Other Miscellaneous Comments).

Commenter Name: James S. Loving

Commenter Affiliation: National Cooperative Refinery Association (NCRA)

Document Control Number: EPA-HQ-OAR-2008-0508-0609.1

Comment Excerpt Number: 5

Comment: EPA should require reporting at the facility level instead of the unit level.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0532.1, excerpt 11.

Commenter Name: Stephen B. Kemp

Commenter Affiliation: Occidental Chemical Corporation (OCC) **Document Control Number:** EPA-HQ-OAR-2008-0508-0644.1

Comment Excerpt Number: 2

Comment: Require GHG emissions to be reported on an overall facility basis, rather than requiring the reporting of GHG emissions within a facility on an equipment-specific basis.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0532.1, excerpt 11.

Commenter Name: Ram K. Singhal

Commenter Affiliation: Rubber Manufacturers Association (RMA) **Document Control Number:** EPA-HQ-OAR-2008-0508-0600

Comment Excerpt Number: 3

Comment: EPA supports reporting on a facility, not a company-wide basis or a smaller process basis for reporting. First, our environmental managers are familiar with keeping emissions inventories that have been required by state and federal law for decades on a facility-basis. Further, because of co-ventures and/or co-ownership of facilities and the fact that ownership of certain facilities can change during a year, the best recordkeeping would be on the basis of a facility, rather than on the basis of ownership of a facility. RMA also wants to underscore for EPA how difficult it would be for facilities if they had to report GHG emissions on anything but a facility-wide basis. For instance, if EPA were to require GHG reporting on a process-line basis, which for flexible packaging would mean on an individual coating line or on the basis of an individual laminating line, the cost and difficulty of estimating emissions would sky-rocket

because we would have to estimate fuel allocation between each process line (most facilities have between two and eight individual processing lines.) This would be further complicated by the fact that some ovens on some lines or direct-fired with natural gas and others are indirect-fired lines. Therefore, the cost of disaggregating fuel usage between various pieces of equipment within a facility is far more onerous that estimating GHGs based simply on fuel throughput at the facility overall. This point about the difficulty of evaluating fuel usage on a unit or process basis versus estimating fuel usage on a facility-wide basis should not be overlooked in finalizing the proposed rule because we can think of no rational purpose for the agency to know anything further than GHGs emitted from a facility overall under the general GHG reporting requirements.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0532.1, excerpt 11. With respect to corporate reporting, see the response to comment EPA-HQ-OAR-2008-0508-0680.1, excerpt 1. For the response to the comment on reporting combustion emissions, see Section III.C in the preamble and the volume of this document titled 'Subpart C: General Stationary Fuel Combustion Sources'. Coating and laminating lines are not subject to this rule. Please see Section II.D of the preamble for more information on the source categories required to report.

Commenter Name: Dale Backlund, Regulatory Affairs Leader, The DOW Chemical Company

and Victoria Evans, National Practice Leader for Greenhouse Gases, URS Corporation

Commenter Affiliation: none

Document Control Number: EPA-HQ-OAR-2008-0508-1338

Comment Excerpt Number: 3

Comment: Downscaling to reporting GHG emissions for individual sources within a facility, as proposed in the EPA rule, will require increased time and effort for reporting organizations.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0532.1, excerpt 11.

Commenter Name: Karen St. John

Commenter Affiliation: BP America Inc. (BP)

Document Control Number: EPA-HQ-OAR-2008-0508-0631.1

Comment Excerpt Number: 8

Comment: The rule as proposed requires unit-level calculations and unit-level reporting and in some cases, requires details on each unit. BP believes that the final rule should only require facility-level summary reporting on emissions. The burden that would be imposed by the proposed rule would far exceed those of any other reporting rule, including the EPA Toxics Release Inventory (TRI). Under the TRI program, reports are submitted to EPA on emissions, without additionally submitting detailed information on how the estimates were derived.

Response: For the response to the comment on unit-level reporting, see the response to comment EPA-HQ-OAR-2008-0508-0532.1, excerpt 11. As pointed out by the commenter, this rule requires more process data to be reported than other programs such as TRI. This is because these programs have different purposes. TRI is a public information program, and the data collected under the program are not used for policy analysis or regulatory compliance. The purpose of this program is to gather accurate and comprehensive data to inform future policies. Also, as explained in the preamble and the response to comments document on verification, EPA will be

acting as the verifier and therefore needs the unit and process level data in order to verify emissions estimates with known ranges expected from various types of processes for a given production or compare data for different plants for similar processes. It also provides information that will be useful in identifying processes that have reduced emissions over time and processes at specific plants that have the most potential for future reductions in emissions.

Commenter Name: See Table 6

Commenter Affiliation:

Document Control Number: EPA-HQ-OAR-2008-0508-0480.1

Comment Excerpt Number: 5

Comment: For the reasons EPA identifies in the Preamble, INGAA agrees that facility-based reporting is more straightforward, useful and feasible than corporate-level reporting of GHG emissions. INGAA notes that facilities that have mixed uses or contain multiple types of source categories may be difficult to disaggregate for purposes of facility-level reporting. For example, there may be no obvious boundary between a transmission compressor and an underground natural gas storage facility located on the same site. In order to facilitate reporting, EPA should permit aggregation of emissions data for diverse source types located at the same facility.

Response: With respect to corporate reporting, see the response to comment EPA-HQ-OAR-2008-0508-0680.1, excerpt 1. Regarding allowing aggregation of emission data from diverse source types at the same facility, see the response to comment EPA-HQ-OAR-2008-0508-0532.1, excerpt 11. EPA is not going final with subpart W (Oil and Natural Gas Systems). As we consider next steps, we will be reviewing the public comments and other relevant information. Therefore, we are not responding to comments on subpart W at this time.

Commenter Name: Gary F. Lindgren

Commenter Affiliation: Calumet Specialty Products Partner, L.P. **Document Control Number:** EPA-HQ-OAR-2008-0508-0626.1

Comment Excerpt Number: 8

Comment: EPA needs to make reporting at the facility-level, not the unit-level.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0532.1, excerpt 11.

Commenter Name: [name not given]

Commenter Affiliation: Texas Association of Business

Document Control Number: EPA-HO-OAR-2008-0508-0698

Comment Excerpt Number: 8

Comment: Reporting should be required only at the facility level and not for individual units. Given the intended use of data and the objectives of the proposed rule, unit-specific data are not necessary and the costs to report at that level cannot be justified.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0532.1, excerpt 11.

Commenter Name: James Salo **Commenter Affiliation:** Trucost Inc.

Document Control Number: EPA-HQ-OAR-2008-0508-0984.1

Comment Excerpt Number: 1

Comment: While we applaud the EPA for this draft Greenhouse Gas Reporting rule, we believe that in order to be useful to the broader user base that exists, greenhouse gas reporting needs to occur at the company level and be associated with all of a company's operations, not just those facilities that fall over a reporting threshold.

Response: For the response to the comment on unit/process-level reporting, see the response to comment EPA-HQ-OAR-2008-0508-0532.1, excerpt 11.

Commenter Name: Kevin Fay

Commenter Affiliation: International Climate Change Partnership (ICCP)

Document Control Number: EPA-HQ-OAR-2008-0508-0490.1

Comment Excerpt Number: 10

Comment: ICCP has concerns that facility level reporting also has potential for double counting and mistakes, e.g., through transfers of materials from one facility to another, or could create an artificial bright line, which could be used to avoid reporting or other future regulatory requirements.

Response: See the preamble for the responses on selection of source categories to report, selection of the level of reporting, and the response to comment EPA-HQ-OAR-2008-0508-0490, excerpt 8. For the response to the comment on reporting of upstream and downstream emissions, see Section II.D of the preamble, as well as the response to comments on legal issues in Volume 9 of this document.

Commenter Name: Sonal Mahida

Commenter Affiliation: Carbon Disclosure Project

Document Control Number: EPA-HQ-OAR-2008-0508-0306.1

Comment Excerpt Number: 4

Comment: EPA's eligibility rules focus on the nature of the facility under consideration. However, CDP does not feel that EPA has been sufficiently clear about who will bear the responsibility for reporting, given that many facilities are in joint ownership, there may not be a majority shareholder, and the majority shareholder is not always the operator. CDP notes, and sympathizes with, EPA's conclusion that reporting by owner or operator at facility level allows flexibility for firms to identify the reporting entity. However, this assumes that in all cases and structure and practical arrangements of the firm will enable an agreement to be reached on the reporting party (selecting from owner(s) and operator(s) as appropriate). CDP's experience is that this does not automatically follow in all cases, and we suggest therefore that EPA should include default or "tie break" provisions that apply where a firm is unable to identify the

reporting party (either owner or operator), contrary to the anticipated approach in the proposed rule.

Response: See the preamble for the response on the selection of the level of reporting. The owner or operator of the facility is required to identify a designated representative for each facility. The designated representative is responsible for submitting the report for the facility and certifying that the data submitted is complete, true, and accurate. The same designated representative may represent one or more facilities and the report may be prepared at a location other than the facility (e.g., the corporate headquarters). For additional information on the designated representative and how data will be submitted, see Section V. of the preamble and Volume 11 (Designated Representative and Data Collection, Reporting, Management, and Dissemination) of this volume.

Commenter Name: Steven D. Meyers

Commenter Affiliation: General Electric Company (GE)

Document Control Number: EPA-HQ-OAR-2008-0508-0532.1

Comment Excerpt Number: 5

Comment: The regulated community will benefit from a clear recitation of what is and what is not included in each source category and a bright line delineating the boundaries between categories. EPA should consider much more simple reporting requirements, potentially applying black line thresholds more fully than currently proposed.

Response: The commenter did not provide examples of where additional clarity was needed. In developing the rule, EPA made reporting requirements as simple as possible while still gathering the type, level and quality of data that will inform our evaluation of CAA options. For each source category, there are simplified calculation methodologies and facilities are only required to report emissions associated with source categories for which calculation methodologies are provided in the rule. In addition, EPA plans to develop guidance materials to help reporters better understand their reporting obligations under the rule.

Commenter Name: Douglas P. Scott

Commenter Affiliation: Illinois Environmental Protection Agency (Illinois EPA)

Document Control Number: EPA-HQ-OAR-2008-0508-0387.1

Comment Excerpt Number: 7

Comment: The rule should allow facilities to go beyond minimum federal mandatory reporting requirements and voluntarily inventory, verify and report their total corporate GHG footprints.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0212m, excerpt 4.

Commenter Name: T. Howard Commenter Affiliation: None

Document Control Number: EPA-HQ-OAR-2008-0508-0565

Comment Excerpt Number: 4

Comment: Finally, I think that EPA recognizes that to apply effective climate policy, it is critical not to take the same approach that has been used for past pollution control programs. However, this can be a difficult mindset to overcome, because regulations for leak detection and repair (LDAR) point source limits and individual facility emissions limits were all developed because it was important not to affect the health of people downwind of those facilities. Clearly, carbon emissions only matter globally. It makes no difference how or where reductions are made, as long as the overall goal is met. Consequently, instead of requiring that all facilities meet a certain limit, or that all components of a certain type meet a performance standard, it would be much more effective to allow companies to reduce emissions anywhere they choose to meet a total company limit. This should result in the same reductions as requiring individual facility limits, because under the new reporting program, all of the emissions reported should be equally well documented and of equal value. The difference is that companies can focus their efforts on the most effective emissions reductions. This is, of course, not just an issue of the cost to the company or to the consumer or to the economy, although those are all critical. If the EPA sets performance standards for each component or sets limits by facility, the extra effort required could easily result in additional secondary carbon emissions. Consequently, allowing a flexible, company-wide approach to carbon limits should actually further EPA's goals for achieving real reductions in greenhouse gas emissions.

Response: The purpose of the rule is to collect GHG emission data to help inform EPA's evaluation of existing CAA options for addressing GHG emissions and climate change. Although the information may also prove useful for assessment of future statutory requirements, that is not the purpose for collecting the data at this time. As future climate policy is developed, EPA may revise reporting requirements under this rule and/or will provide more specific guidance to regulated entities.

Commenter Name: Dale E. Furrow

Commenter Affiliation: The George Washington University School of Public Health MPH

Candidate

Document Control Number: EPA-HQ-OAR-2008-0508-0219.1

Comment Excerpt Number: 5

Comment: The application of the rule and the tracking, reporting, recordkeeping, and verification requirements appear to be designed toward individual facilities. Large corporations with production in multiple facilities in different localities will be able to evaluate each facility on its own merit to determine whether it exceeds the threshold requirements. In such instances, these corporations may be able to adjust their operations to account for the threshold and avoid reporting their emissions. On the large scale, this could result in significant underreporting and skew the data. Large corporations falling under common ownership should be required to include emissions from all facilities under their management when determining their reporting status.

Response: See the preamble for the response on the selection of the level of reporting and the selection of thresholds. It should be noted that rule applicability is determined for each individual facility (as defined in 40 CFR part 98, subpart A) based on the source categories and emissions specific to the facility. Each facility must determine applicability as specified in 40 CFR 98.2(a). Since this rule does not impose any emission limits on GHGs and costs of compliance are not significant, it is unlikely this rule would serve as sufficient incentive for corporations to limit the production at a facility or relocate operations to a different facility to avoid compliance with this

rule. Many other factors, such as production costs, market demand, and transport costs of raw materials, are more likely to influence corporate decisions regarding production at individual facilities. However, we will review the emissions from each facility to evaluate where facilities are adjusting their operations to avoid reporting under this rule.

Commenter Name: Anonymous

Commenter Affiliation: Drexel University Earle Mack College of Law

Document Control Number: EPA-HQ-OAR-2008-0508-0237.1

Comment Excerpt Number: 1

Comment: More direct circumvention procedures should be added to the rule. Currently, the rule seems to deal cursorily with circumvention [see "portable" definition page 16625] What if a company has several facilities that separately, are de minimis, but in aggregate, they are a non-de minimis polluter? Will that company at the corporate level be responsible for the pollution they emit? This regulation does not seem to require so. It seems that circumvention, although illegal, is not addressed in this rule. A company at the corporate level, may be able to circumvent this rule by dividing up their pollution sources across different facilities, to avoid reporting, enforcement, and the regulations in general.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0219.1, excerpt 5.

Commenter Name: Olon Plunk

Commenter Affiliation: Xcel Energy Inc.

Document Control Number: EPA-HQ-OAR-2008-0508-0444.1

Comment Excerpt Number: 7

Comment: Notwithstanding the foregoing, climate policy at the national level appears likely to place great importance on entity-wide reporting of emissions arising from all power plants providing electricity to the same utility system, regardless of their owner. EPA has acknowledged that data submitted pursuant to the mandatory reporting rule will serve as basis for a GHG cap-and-trade program. Currently, the proposed rule establishes facility-level GHG reporting. However, because ACES would create an entity-wide allocation scheme for utilities, EPA should consider how it would approach entity-wide carbon accounting issues associated with purchased power and, in particular, how it would divide historic emissions arising from retail electric customer sales from emissions arising from wholesale electric customer sales. In this regard, we urge EPA to clarify that the proportion of emissions attributable to wholesale purchasers of power will be based on the marginal {in utility dispatch parlance, the "top of the stack") CO₂ emissions arising from the utility system. Had the wholesale customers not been interconnected to the utility system during the time of the allocation, the utility would have dispatched its cheapest plants first to serve its retail customers, eliminating only the marginal CO₂ emissions. Other agencies, such as the Federal Energy Regulatory Commission and state Public Utilities Commissions, may assist in developing entity-wide GHG reporting protocols to determine what marginal emissions should be attributed to a utility's wholesale load.

Response: The purpose of the rule is to collect GHG emission data to help inform EPA's evaluation of existing CAA options for addressing GHG emissions and climate change. Although the information may also prove useful for assessment of future statutory requirements,

that is not the purpose for collecting the data at this time. As future climate policy is developed, EPA may revise reporting requirements under this rule and/or will provide more specific guidance to regulated entities.

Commenter Name: See Table 8

Commenter Affiliation:

Document Control Number: EPA-HQ-OAR-2008-0508-0679.1

Comment Excerpt Number: 25

Comment: EPA requires reporting at the facility level, since it concluded that corporate level reporting is too complex for mandatory reporting, "Although many voluntary programs such as Climate Leaders or TCR have corporate-level reporting systems, EPA concluded that corporatelevel reporting is overly complex under a mandatory system involving many reporters and thus is not appropriate for this rule, except where discussed below. Complex ownership structures and the frequent changes in ownership structure make it difficult to establish accountability over time and ensure consistent and uniform data collection at the facility-level". (74 FR 68, page 16470) An exception to facility level reporting is for some supplier source categories (e.g., importers of fuels and industrial GHGs). Since importers are not individual facilities in the traditional sense of the word, this reporting responsibility would be vested with corporate ownership. API comments Consistent corporate level reporting is illustrated in the API/IPIECA "Petroleum Industry GHG Reporting Guidelines". These industry guidelines provide the necessary guidance for corporate level reporting and are used by the industry sector worldwide. However, for the purposed of this data collection, facility-wide reporting would be acceptable, provided it does not require further detail at the individual device and source level. Additionally, reporting should be limited to direct GHG emissions under the direct operational control of the reporting facility. For fuel suppliers, the information collected should be limited to the corporate level without reporting at the individual facility level. Adopting a more aggregated reporting approach would relieve some of the reporting and data confidentiality issues and could be better aligned with fuels movement reports already provided to other agencies of the federal government.

Response: For the response to the comment on unit/process-level reporting, see the response to comment EPA-HQ-OAR-2008-0508-0532.1, excerpt 11. For any concerns about confidentiality of submitted data, please see the discussion of our plans to address CBI and emissions data in the preamble section for the response on CBI.

Commenter Name: Sonal Mahida

Commenter Affiliation: Carbon Disclosure Project

Document Control Number: EPA-HQ-OAR-2008-0508-0306.1

Comment Excerpt Number: 5

Comment: CDP supports EPA in seeking to gather facility-level data. The best reason for facility-level reporting is that it provides the most granular data for use in future policy design, such as a cap and trade scheme. Because cap and trade regulations already developed or being developed outside the United States have regulated at facility level (e.g. European Union Emissions Trading Scheme, proposed trading schemes in Australia and New Zealand) this level of reporting has evidently been judged most appropriate by other rule-making bodies. Reporting at facility level is most likely to be compatible with international reporting requirements in the

event that the United States decides to link to foreign or international schemes. EPA's argument that facility-level reporting is better because companies can have complex or changing ownership structures may hold less weight. In practice these issues can often apply to individual facilities, just as they can to corporations. Ensuring accountability over time in the event of management-level changes is a normal part of any compliance regime (environmental or otherwise) and is part of doing business for any company. The argument that the best technical knowledge exists at the facility level is also not decisive, as any corporate footprint will normally be calculated by aggregating facility-level data created by these same experts. CDP believes that there are good arguments for reporting at corporate level. Many stakeholders, including investors and members of the public, have an interest in this data. Investors will usually choose to invest in a company rather than an individual plant, and will want to know that company's potential climate change liability, as well as whether it is well positioned to profit from the transition to the low carbon economy. Members of the public will also engage at corporate level, for example as EPA says in its preamble (p794) 'Publicly available emissions data also would allow individuals to alter their consumption habits based on the GHG emissions of producers.' Individuals are much more likely to make such decisions on the basis of corporate data, especially if the product in question could have been made at any one of a number of facilities. A final point is that collecting data at corporate level will capture more data overall, because it will include small facilities and office buildings that fall under the proposed reporting thresholds for facilities. CDP collects data at corporate level because that is what institutional investors have asked for. As already stated, CDP sees strong arguments for facility-level reporting. CDP recommends that EPA look again at whether there may also be arguments for reporting at a company level. As a minimum, CDP suggests that EPA should incorporate an identification field in the records of individual facilities that will allow users of the data to aggregate the facilities which belong to an individual corporation or corporate group. This issue will require consideration in the design phase to ensure that an appropriate identifier field is built in. To give an example, it is very difficult to attribute to corporations the emissions data reported to the European Union Emissions Trading Scheme because facilities which belong to the same corporate group are often registered under the names of different legal entities. EPA should seek to avoid this problem.

Response: See the preamble for the response on the selection of the level of reporting.

Commenter Name: Sam Chamberlain

Commenter Affiliation: Murphy Oil Corporation

Document Control Number: EPA-HQ-OAR-2008-0508-0625

Comment Excerpt Number: 4

Comment: EPA decided to require reporting at the facility level and not at the corporate level, since they contend that corporate level reporting is too complex for mandatory reporting due to frequent ownership changes and partial holdings in different facilities. An exception to facility level reporting is some supplier source categories (e.g., importers of fuels and industrial GHGs). Since importers are not individual facilities in the traditional sense of the word, this reporting responsibility would be vested with corporate ownership. As a small integrated oil and gas company Murphy believes that consistent corporate level reporting is attainable. The purpose of the GHG emission reporting is for evaluating the level of emissions to establish policy. Reporting of equipment emissions or unit specific emissions goes far beyond the intent or realistic information need for EPA. Murphy has surveyed its plant operations and there is

consensus that corporate reporting of emissions data is preferred, with coding for each site or facility within the report. This additionally protects confidential information. It should also be noted that Murphy has interests in numerous other activities in which we do not have operational or ownership control and thus do not plan to report these equity business arrangements. In conclusion, the emission information collected by EPA should be limited to the corporate level without requiring reporting at the individual facility level. By requiring data at the individual facility there is a potential for double counting since fuels, as a commodity, could pass through different custody-transfer points prior to reaching the end-consumer. Also, a corporate-wide approach would become more streamlined. Additionally, it should be limited to reporting of GHG emissions under the direct operational control of the corporation.

Response: For the response to the comment on unit/process-level reporting, see the response to comment EPA-HQ-OAR-2008-0508-0532.1, excerpt 11. See the preamble for the response on the selection of the level of reporting. For the response reporting of upstream and downstream emissions, see the preamble (section II.D), as well as the response to comments on legal issues (volume 9).

Commenter Name: James Salo **Commenter Affiliation:** Trucost Inc.

Document Control Number: EPA-HQ-OAR-2008-0508-0984.1

Comment Excerpt Number: 3

Comment: Company-level data is critical for companies and investors alike to help them understand the material financial risks within their company's operations or associated with their investments. With a cost of carbon already applied in Europe, and many places around the world, and Cap and Trade under consideration in the United States, understanding business risk exposure to greenhouse gasses will continue to grow in importance. Cost accounting for a company's direct emissions alone is not enough to determine a company's total cost exposure because there are additional supply chain risks consequent to passed-along price increases in purchased energy, purchased materials, etc.

Response: See the preamble for the response on the selection of the level of reporting.

Commenter Name: Fiji George

Commenter Affiliation: El Paso Corporation

Document Control Number: EPA-HQ-OAR-2008-0508-0398.1

Comment Excerpt Number: 7

Comment: El Paso supports the requirement to submit facility-level GHG emissions reports. However, in order to minimize reporting burden, EPA should allow the facility-level emissions to be aggregated across a corporation and submitted as a single consolidated, entity-wide report to the EPA. This flexibility will ensure that EPA receives facility-level-quality emissions data and but will prevent companies like El Paso from having to submit 140+ individual emission reports for each of its facilities [See Table 3 in DCN: EPA-HQ-OAR-2008-0508-0398.1 for a list of oil and natural gas systems under El Paso's control].

Response: For the response to the comment on unit/process-level reporting, see the response to

comment EPA-HQ-OAR-2008-0508-0532.1, excerpt 11.

EPA intends to include a "bulk upload" option in its design and development of the data system to facilitate reporting under this rule. This option may allow the submission of data from more than one facility at a time to EPA, provided that all facilities share the same designated representative. Every submission that is covered by a different designated representative would require a separate log-in in order to meet CROMERR requirements. For more information about the designated representative, please see preamble section V and the comment response document "Designated Representative, and Data Collection, Reporting, Management, and Dissemination."

Commenter Name: See Table 5

Commenter Affiliation:

Document Control Number: EPA-HQ-OAR-2008-0508-0455.1

Comment Excerpt Number: 17

Comment: The Preamble states that "reporting would be at the facility level except certain suppliers and vehicle manufacturers would report at the corporate level." It is unclear, however, whether companies that own or operate multiple reporting facilities would be entitled to aggregate the submission of their individual facility reports if each has been certified by a facility's Designated Representative. The Class of '85 believes that the Agency should clarify whether companies may aggregate the reports of their multiple facilities for submission to EPA.

Response: For the response to the comment on unit/process-level reporting, see the response to comment EPA-HQ-OAR-2008-0508-0532.1, excerpt 11. For the response to the comment on how to report data for multiple facilities, see the response to comment EPA-HQ-OAR-2008-0508-0398.1, excerpt 7.

Commenter Name: Willie R. Taylor

Commenter Affiliation: U.S. Department of the Interior

Document Control Number: EPA-HQ-OAR-2008-0508-0474.1

Comment Excerpt Number: 10

Comment: While we agree that facility-level emissions are needed, we propose that the reporting of the emissions be done by company, rather than by each facility. Each facility would submit the necessary activity data to the owner, who would process the data to generate emissions for each facility. This would be more efficient, result in greater consistency, and reduce the burden on the individual facility. In many instances in the Gulf of Mexico some companies own a large number of facilities.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0398.1, excerpt 7.

Commenter Name: Lawrence W. Kavanagh

Commenter Affiliation: American Iron and Steel Institute (AISI) **Document Control Number:** EPA-HQ-OAR-2008-0508-0695.1

Comment Excerpt Number: 33

Comment: The proposed rule calls for reporting GHG emissions on a facility level and defines a facility in terms of contiguous property. AISI and ACCCI believe this will be a satisfactory basis for reporting in most cases. However, we believe EPA should provide companies the option of reporting on a corporate-wide basis or reporting combined facilities where reporting efficiencies. physical conditions, or operational situations call for such flexibility. For example, companies may have separate but closely related facilities that are combined operationally, operate under common management, and/or have combined administrative, accounting, or purchasing functions but are not contiguous. We believe that combined reporting of such facilities will provide needed flexibility and cost efficiencies without compromising the purpose of the reporting rule. For these reasons, we request that EPA provide the flexibility to allow reporting for multiple facilities when circumstances warrant. In addition, many companies in our industry lease property within the confines of facility boundaries for contractor operations, such as slag or scrap processing or industrial gas production. It is not clear from the proposed rule whether the GHG reporting obligations for such operations (e.g., for a small combustion unit) fall to the owner of the facility in which those operations occur or to the contractor, whether the reporting threshold applies separately to those operations, or whether those operations are covered by the sector-specific methodology. At a minimum, clarity is needed, but the reporting flexibility called for above would also be beneficial to account for these circumstances.

Response: See the preamble for the response on the selection of the level of reporting. For the response to the comment on who must report data, see the response to comment EPA-HQ-OAR-2008-0508-0306.1, excerpt 4 and Volume 11 (Designated Representative and Data Collection, Reporting, Management, and Dissemination) of this document.

Commenter Name: Kathleen M. Sgamma

Commenter Affiliation: Independent Petroleum Association of Mountain States (IPAMS)

Document Control Number: EPA-HQ-OAR-2008-0508-0521.1

Comment Excerpt Number: 4

Comment: Data reported should be limited to greenhouse gas emissions under the direct operation control of the reporter.

Response: For the response to the comment on who must report data, see the response to comment EPA-HQ-OAR-2008-0508-0306.1, excerpt 4 and Volume 11 (Designated Representative and Data Collection, Reporting, Management, and Dissemination) of this document.

Commenter Name: James P. Brooks

Commenter Affiliation: Maine Department of Environmental Protection

Document Control Number: EPA-HQ-OAR-2008-0508-0404.1

Comment Excerpt Number: 3

Comment: EPA should require emission estimates at the unit level rather than facility level. Unit level emission estimates will provide more useful information for policymaking purposes,

and enable sources to better understand and evaluate the emissions impacts of their operational practices.

Response: See the response to comment EPA-HQ-OAR-2008-0508-0532.1, excerpt 11.

Commenter Name: Myra C. Reece

Commenter Affiliation: South Carolina Department of Health and Environmental Control (SC

DHEC)

Document Control Number: EPA-HQ-OAR-2008-0508-0654.1

Comment Excerpt Number: 6

Comment: We believe data collected under this rule should be process level data. The process level data is already collected by the states for the NEI and, therefore, is readily available. Emissions data collected at the process level can easily be aggregated to the facility or corporate level. However, facility or corporate level data cannot easily be broken down into individual processes. SC DHEC has many years of experience collecting data at the process level and would like EPA to make use of existing programs in order to collect GHG data. We currently collect data on several greenhouse gases at the process level, and would like for that data to support rather than duplicate efforts under this proposed rule.

Response: For the response to the comment on unit/process-level reporting, see the response to comment EPA-HQ-OAR-2008-0508-0532.1, excerpt 11. See the preamble and Volume 6 of this comment response document for the response on the relationship of this rule to other programs.

Commenter Name: Karyn Andersen Commenter Affiliation: RR Donnelley

Document Control Number: EPA-HQ-OAR-2008-0508-0345.1

Comment Excerpt Number: 3

Comment: The data reporting process requires facility level reporting AND unit or process level reporting. Each press/RTO/boiler will require individual reporting. Where the units are small, they can be combined into logical groups that total 250MM btu/hr or less. Regardless, requiring unit/process level reporting requires updating equipment lists and reporting methodology, etc as plants change (grow, shrink or simply re-tool). In some cases, the equipment at the source level may not be monitored currently. Will this infrastructure need to be installed for compliance?

Response: See the response to comment EPA-HQ-OAR-2008-0508-0532.1, excerpt 11. Please see Section III.C of the preamble and the volume of this document titled "Subpart C: General Stationary Fuel Combustion" for general stationary fuel combustion monitoring requirements, including any equipment installation.

Commenter Name: Sally V. Allen

Commenter Affiliation: Gary-Williams Energy Corporation **Document Control Number:** EPA-HQ-OAR-2008-0508-0982.1

Comment Excerpt Number: 7

Comment: Reporting should be required at the facility level, not at the unit level. Although SBRs would collect unit level data which would be available for verification, calculations that must be made and reported at the unit level would add significantly to the program costs — without adding data of any measurable value. EPA should not require reporting information on crude slates. The actual crude slate at a given plant will have only a minor impact on overall GHS emissions; the measures of the composition of various crude oils are considered to be unreliable and inaccurate measures of GHG emissions from a plant and its products.

Response: For the response to the comment on reporting emissions at the unit level, see the response to comment EPA-HQ-OAR-2008-0508-0532.1, excerpt 11. With respect to the comment on reporting information on crude slates, see the volume of this document titled "Subpart MM: Suppliers of Petroleum Products".

Commenter Name: See Table 4

Commenter Affiliation:

Document Control Number: EPA-HQ-OAR-2008-0508-0433.2

Comment Excerpt Number: 2

Comment: NPRA believes that for Subparts MM and NN, reporting should be done at a company level only. Facility level data will be available for EPA verification only. Since fuels are produced by a company as a whole, corporate level reporting should be accepted in the proposed rule. There are concerns that facility level reporting will disclose Confidential Business Information.

Response: EPA has retained corporate level reporting for importers and exporters and facility level reporting for producers (e.g., refineries). For additional information, see the preamble for the response on the selection of the level of reporting. For the response to the comment on the confidentiality of submitted data, please see the discussion of our plans to address CBI and emissions data in the preamble section for the response on CBI.

Commenter Name: See Table 4

Commenter Affiliation:

Document Control Number: EPA-HQ-OAR-2008-0508-0433.1

Comment Excerpt Number: 9

Comment: NPRA believes that for Subparts MM and NN, reporting should be done at a company level only. Facility level data should be available for EPA verification only.

Response: EPA has retained corporate level reporting for importers and exporters and facility level reporting for producers (e.g., refineries). For additional information, see the preamble for the response on the selection of the level of reporting.

Commenter Name: Rich Raiders **Commenter Affiliation:** Arkema Inc.

Document Control Number: EPA-HQ-OAR-2008-0508-0511.1

Comment Excerpt Number: 16

Comment: Many of the current climate reporting markets, such as the current voluntary EPA HFC reporting system (which is modeled after the existing EPA ODS reporting system), EPA Climate Leaders, and the Climate Registry, require corporate wide annual GHG reporting systems. EPA operates a voluntary HFC reporting system based on the existing EPA ODS corporate-wide reporting system. In these systems, reporters roll up all emissions from all controlled facilities, and report annual GHG or ODS emissions for the aggregated group. All submittal protocols, including approval by the designated representative, are managed at the corporate level for production, imports, exports, and supply reporting. As a participant in both the EPA ODS and HFC reporting systems, Arkema supports EPA's approach used during design and implementation of these data systems, and believes that the existing systems would serve as appropriate starting points for EPA to build a reporting system from. EPA should build from the existing infrastructure when designing the upcoming GHG reporting system, thereby avoiding effort duplication.

We understand that EPA may need to request subsets of corporate-wide data, in addition to the corporate-wide information that is required by several climate change reporting organizations, because of Title V considerations at individual facilities. EPA can resolve this conflict by requiring the corporate reporter to identify emissions from each reporting facility, and, within each facility, report total emissions and marketed GHG sales organized by reporting location and by Part 98 subpart, within the corporate reporting structure. Providing for corporate reporting will increase the accuracy and consistency of reporting by consolidating the reporting function consistent with existing EPA ODS and HFC reporting protocols.

Response: EPA has retained corporate level reporting for importers and exporters and facility level reporting for all other sources. For additional information, see the preamble for the response on the selection of the level of reporting. For the response on who is responsible for submitting the data and the how the data will be submitted to EPA, see the responses to comments EPA-HQ-OAR-2008-0508-0306.1, excerpt 4 and EPA-HQ-OAR-2008-0508-0398.1, excerpt 7.

We are unable to respond to the comment regarding the 'Title V considerations' and 'conflicts' between this rule and Title V because the commenter did not identify the specific Title V considerations and conflicts that concern him. Note that the requirements of this rule are not considered 'applicable requirements' under the Title V operating program (see Volume 9 (Legal Issues) of this volume for additional information).

Table 1

Tuble 1		
COMMENTER	AFFILIATE	DCN
C. Lish	Sierra Club	EPA-HQ-OAR-2008-0508-0358
See Docket EPA-HQ-OAR-2008-0508 for a memorandum listing all members of the Sierra Club who submitted		
comment letters identical to EPA-HQ-OAR-2008-0508-0358.		

Table 2

COMMENTER	AFFILIATE	DCN
Lorraine Krupa Gershman	American Chemistry Council, et al.	EPA-HQ-OAR-2008-0508-0477.1
Audrae Erickson	Corn Refiners Association	EPA-HQ-OAR-2008-0508-0519.1
Lawrence W. Kavanagh	American Iron and Steel Institute (AISI)	EPA-HQ-OAR-2008-0508-0695.1

Table 3

COMMENTER	AFFILIATE	DCN
Mark Dopp	American Meat Institute (AMI)	EPA-HQ-OAR-2008-0508-0440.1
Stewart T. Leeth	Smithfield Foods, Inc.	EPA-HQ-OAR-2008-0508-0553

Table 4

COMMENTER	AFFILIATE	DCN
James Greenwood	Valero Energy Corporation	EPA-HQ-OAR-2008-0508-0571.1
Charles T. Drevna	National Petrochemical and Refiners	EPA-HQ-OAR-2008-0508-0433.1
	Association	EPA-HQ-OAR-2008-0508-0433.2

Table 5

COMMENTER	AFFILIATE	DCN
Olon Plunk	Xcel Energy Inc.	EPA-HQ-OAR-2008-0508-0444
Debra J. Jezouit	Class of '85 Regulatory Response Group	EPA-HQ-OAR-2008-0508-0455.1

Table 6

COMMENTER	AFFILIATE	DCN
Lisa Beal	Interstate Natural Gas Association of America	EPA-HQ-OAR-2008-0508-0480.1
	(INGAA)	
Richard Bye	CenterPoint Energy, Inc.	EPA-HQ-OAR-2008-0508-2124.1
Brianne Metzger	Spectra Energy Corporation	EPA-HQ-OAR-2008-0508-0364.1

Table 7

COMMENTER	AFFILIATE	DCN
Olon Plunk	Xcel Energy Inc.	EPA-HQ-OAR-2008-0508-0444
R. Skip Horvath	Natural Gas Council (NGC)	EPA-HQ-OAR-2008-0508-0530.1

Table 8

COMMENTER	AFFILIATE	DCN
Karin Ritter	American Petroleum Institute (API)	EPA-HQ-OAR-2008-0508-0679.1
James Greenwood	Valero Energy Corporation	EPA-HQ-OAR-2008-0508-0571.1
William W. Grygar II	Anadarko Petroleum Corporation	EPA-HQ-OAR-2008-0508-0459.1

Table 9

COMMENTER	AFFILIATE	DCN
Chris Hobson	The Southern Company	EPA-HQ-OAR-2008-0508-1645.1
Quinlan J. Shea, III	Edison Electric Institute (EEI)	EPA-HQ-OAR-2008-0508-1021.1

Table 10

COMMENTER	AFFILIATE	DCN
Burton Eller	National Cattleman's Beef Association	EPA-HQ-OAR-2008-0508-0418.1
	(NCBA)	
Rick Stott	Agri Beef Co.	EPA-HQ-OAR-2008-0508-0371.1
Todd Schroeder	Nebraska Cattlemen, Inc. (NC)	EPA-HQ-OAR-2008-0508-0416.1
William Hammerich	Colorado Livestock Association	EPA-HQ-OAR-2008-0508-0393.1
Ross Wilson	Texas Cattle Feeders Association (TCFA)	EPA-HQ-OAR-2008-0508-0395.1
William Hammerich	Colorado Livestock Association (CLA)	EPA-HQ-OAR-2008-0508-0425.1

Table 11

COMMENTER	AFFILIATE	DCN
Craig Holt Segall	Sierra Club	EPA-HQ-OAR-2008-0508-0635.1
Melissa Thrailkill	Center for Biological Diversity	EPA-HQ-OAR-2008-0508-0430.1

146